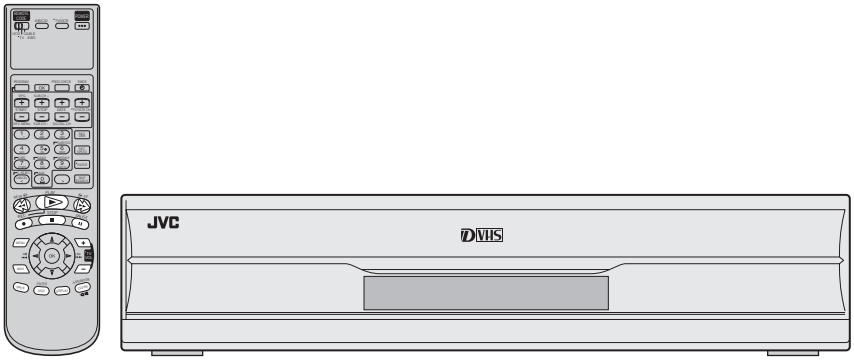
JVC

SERVICE MANUAL

D-VHS DIGITAL RECORDER

HM-DH5US,HM-DT100US



HM-DH5US,HM-DT100US [D4D4, D4D7]

For disassembling and assembling of MECHANISM ASSEMBLY, refer to the SERVICE MANUAL No.86700(MECHANISM ASSEMBLY).

TABLE OF CONTENTS

1 PRECAUTION 1-3
2 SPECIFIC SERVICE INSTRUCTIONS 1-5
3 DISASSEMBLY 1-8
4 ADJUSTMENT 1-11
5 TROUBLESHOOTING 1-18

COPYRIGHT © 2004 Victor Company of Japan, Limited

No.YD032
2004/11

SPECIFICATION

	HM-DH5US	HM-DT100US
GENERAL		
Power requirement	AC 120 V, 60 Hz	
Power consumption		
Power on	45 W	60 W
Power off	14 W	
Temperature		
Operating	5°C to 40°C (41°F to 104°F)	
Storage	-20°C to 60°C (-4°F to 140°F)	
Operating position	Horizontal only	
Dimensions (W × H × D)	435 mm × 96 mm × 376 mm (17-3/16" × 3-4/5" × 14-4/5")	435 mm × 96 mm × 383 mm (17-3/16" × 3-4/5" × 15-1/8")
Weight	5.1 kg (11.2 lbs)	5.8 kg (12.8 lbs)
Maximum recording time		
D-VHS (HS)	210 min. with DF-420 video cassette	
D-VHS (STD)	420 min. with DF-420 video cassette	
D-VHS (LS3)	1260 min. with DF-420 video cassette	
S-VHS/VHS (SP)	210 min. with ST-210 video cassette	
S-VHS/VHS (EP)	630 min. with ST-210 video cassette	
VIDEO/AUDIO (D-VHS)		
Video format	MPEG2 standard	
Audio format	Encode MPEG1 Layer2, Decode MPEG1 Layer2/Dolby Digital, LINEAR PCM (HS/STD)	
Track composition		
Tape speed	33.4 mm/sec (HS mode), 16.67 mm/sec (STD mode), 5.55 mm/sec (LS3 mode)	
Head azimuth	±30 deg	
Drum rotation	1800 rpm	
Tracking system	CTL track system	
Recording specification		
Main data input rate	28.2 Mbps (HS mode), 14.1 Mbps (STD mode), 4.7 Mbps (LS3 mode)	
Interface	IEEE1394 compliant DTCP digital copy protection compatible	
VIDEO/AUDIO (S-VHS/VHS)		
Format	S-VHS/VHS NTSC standard	
Signal system	NTSC-type color signal and EIA monochrome signal, 525 lines/60 fields	
Recording/Playback system	DA4 (Double Azimuth) head helical scan system	
Signal-to-noise ratio	45 dB	
Frequency range	70 Hz to 10,000 Hz (Normal audio), 20 Hz to 20,000 Hz (Hi-Fi audio)	
TUNER		
Tuning system	Frequency synthesized tuner	
Channel coverage	VHF: Channels 2 - 13, UHF: Channels 14 - 69, CATV: 113 Channels	
TIMER		
Clock reference	Quartz	
Program capacity	1-year programmable timer/24 programs	
Memory backup time	Approx. 10 min.	
CONNECTORS		
Input/Output		
Antenna	75 Ω, F-type	
S-video input	Y : 0.8 - 1.2 Vp-p, 75 Ω, C : 0.2 - 0.4 Vp-p, 75 Ω	
S-video output	Y : 1.0 Vp-p, 75 Ω, C : 0.29 Vp-p, 75 Ω	
Video input	0.5 - 2.0 Vp-p, 75 Ω (pin jack)	
Video output	1.0 Vp-p, 75 Ω (pin jack)	
Audio input	-8 dB, 50 kΩ (pin jack) Corresponding to mono (left)	
Audio output	-8 dB, 1 kΩ (pin jack)	
i.Link	4-pin (S400) for MPEG2 input/output, DV input	
Component video output	Y : 1.0 Vp-p, 75 Ω, CB/CR, PB/PR 0.7 Vp-p, 75 Ω	
HDMI output	19-pin Corresponding to HDCP	
JLIP	Ø3.5 mm	
AV Compulink	Ø3.5 mm	
CABLE BOX	Ø3.5 mm	
Digital audio output		
Optical	-18 dBm, 660 nm Corresponding to Dolby Digital and DTS Digital Surround Bit stream. Selectable in digital audio output setting menu.	
ACCESSORIES		
Provided accessories	Infrared remote control unit, AA battery x 2, Audio cable, RF cable (F-type), S-video cable (4-pin), Controller	

- Specifications shown are for SP mode unless otherwise specified.
- E.& O.E. Design and specifications subject to change without notice.
- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.Confidential unpublished works. Copyright 1992-1997 Dolby Laboratories. All rights reserved.
- VCR Plus+, C^3 and PlusCode are registered trademarks of Gemstar Development Corporation.The VCR Plus+ system is manufactured under license from Gemstar Development Corporation. US Patent Numbers 5,307,173; 5,335,079; 4,908,713; 4,751,578; and 4,706,121.
- DSS^{TM} is an official trademark of DIRECTV, Inc., a unit of GM Hughes Electronics. DISH Network^{TM} is a trademark of Echostar Communications Corporation.
- "DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- i.Link refers to the IEEE1394-1995 industry specification and extensions thereof. The i.Link logo is used for products compliant with the i.Link standard.

SECTION 1
PRECAUTION

1.1 SAFTY PRECAUTIONS

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold.However,in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

1.1.1 Precautions during Servicing

(1) Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product.When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

(2) Parts identified by the ⚠symbol and shaded ( ) parts are critical for safety.
Replace only with specified part numbers.

NOTE :

Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

(3) Fuse replacement caution notice.
Caution for continued protection against fire hazard.
Replace only with same type and rated fuse(s) as specified.

(4) Use specified internal wiring. Note especially:
- Wires covered with PVC tubing
- Double insulated wires
- High voltage leads

(5) Use specified insulating materials for hazardous live parts. Note especially:
- Insulation Tape
- PVC tubing
- Spacers
- Insulation sheets for transistors
- Barrier

(6) When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

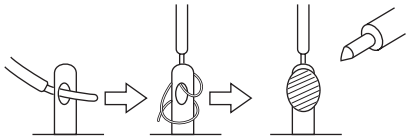


Fig.1-1-1

(7) Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

(8) Check that replaced wires do not contact sharp edged or pointed parts.

(9) When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

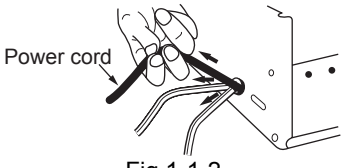


Fig.1-1-2

(10) Also check areas surrounding repaired locations.

(11) Products using cathode ray tubes (CRTs)In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits.Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

(12) Crimp type wire connectorIn such cases as when replacing the power transformer in sets where the connections between the power cord and power trans former primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.
- **Connector part number** :E03830-001
- **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.
- **Replacement procedure**

a) Remove the old connector by cutting the wires at a point close to the connector.Important : Do not reuse a connector (discard it).

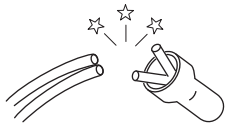


Fig.1-1-3

b) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

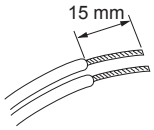


Fig.1-1-4

c) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

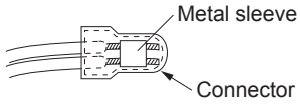


Fig.1-1-5

d) As shown in Fig.1-1-6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

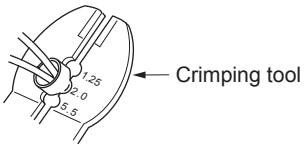


Fig.1-1-6

e) Check the four points noted in Fig.1-1-7.

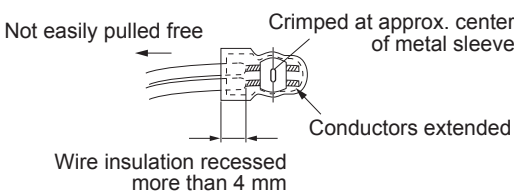

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig.1-1-7

1.1.2 Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

(1) Insulation resistance test
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).See table 1 below.

(2) Dielectric strength test
Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See Fig.1-1-11 below.

(3) Clearance distance
When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See Fig.1-1-11 below.

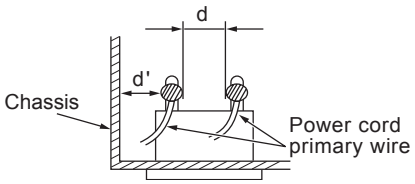


Fig.1-1-8

(4) Leakage current test
Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
Measuring Method : (Power ON)Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See Fig.1-1-9 and following Fig.1-1-12.

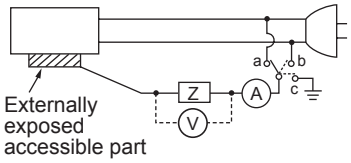
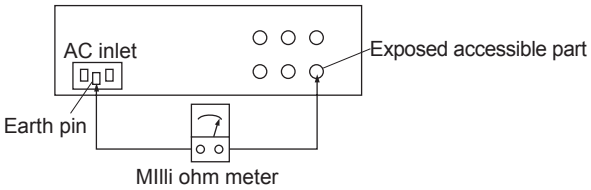


Fig.1-1-9

(5) Grounding (Class 1 model only)
Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).Measuring Method:
Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See Fig.1-1-10 and grounding specifications.



Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	Z ≦ 0.1 ohm
Europe & Australia	Z ≦ 0.5 ohm

Fig.1-1-10

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	R≧ 1 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3 mm
100 to 240 V			AC 1.5 kV 1 minute	d, d' ≧ 4 mm
110 to 130 V	USA & Canada	1 MΩ ≦R≦ 12 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3.2 mm
110 to 130 V 200 to 240 V	Europe & Australia	R≧ 10 MΩ/500 V DC	AC 3 kV 1 minute (Class Ⅱ) AC 1.5 kV 1 minute (Class Ⅰ)	d ≧ 4 mm d' ≧ 8 mm (Power cord) d' ≧ 6 mm (Primary wire)

Fig.1-1-11

AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	1 kΩ	i ≦ 1 mA rms	Exposed accessible parts
110 to 130 V	USA & Canada	0.15 μF, 1.5 kΩ	i ≦ 0.5 mA rms	Exposed accessible parts
110 to 130 V 220 to 240 V	Europe & Australia	2 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Antenna earth terminals
		50 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Other terminals

Fig.1-1-12

NOTE :
These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 Service position

This unit has been designed so that the Mechanism and Main board assemblies can be removed together from the bottom chassis. Before diagnosing or servicing the circuit boards, take out the major parts from the bottom chassis.

2.1.1 How to set the "Service position"

(1) Refer to the disassembly procedure and perform the disassembly of the major parts before removing the Mechanism assembly.
(2) Remove the screws that fix the Mechanism, Main board assembly to the bottom chassis. If any other screws are used to fix the boards, remove them also.
(3) Remove the combined Mechanism, switching regulator, digital, junction and Main board assemblies.
(4) If any other major parts are used, remove them also.
(5) Connect the wires and connectors of the major parts that have been removed in steps (1) to (4). (Refer to Fig. 2-1a, 2-1b.)
(6) Place the combined Mechanism, Main board and other board assemblies upside down.
(7) Insert the power cord plug into the power outlet and then proceed with the diagnostics and servicing of the board assembly.

Notes:

- **Before inserting the power cord plug into the power outlet, make sure that none of the electrical parts are able to short-circuit between the workbench and the board assembly.**
- **For the disassembly procedure of the major parts and details of the precautions to be taken, see "Removing the major parts".**
- **If there are wire connections from the Main board and Mechanism assemblies to the other major parts, be sure to remove them (including wires connected to the major parts) first before performing step (2).**
- **When carrying out diagnosis and repair of the Main board assembly in the "Service position", be sure to ground both the Main board and Mechanism assemblies. If they are improperly grounded, there may be noise on the playback picture or FDP counter display may move even when the mechanism is kept in an inoperative status.**
- **In order to diagnose the playback or recording of the cassette tape, set the Mechanism assembly to the required mode before placing it upside down. If the mechanism mode is changed (including ejection) while it is in an upside down position the tape inside may be damaged.**
- **For some models, the mechanism and board assemblies are attached by connectors only. When carrying out a diagnosis or repair of the boards in the "Service position", make sure that the connectors are not disconnected.**

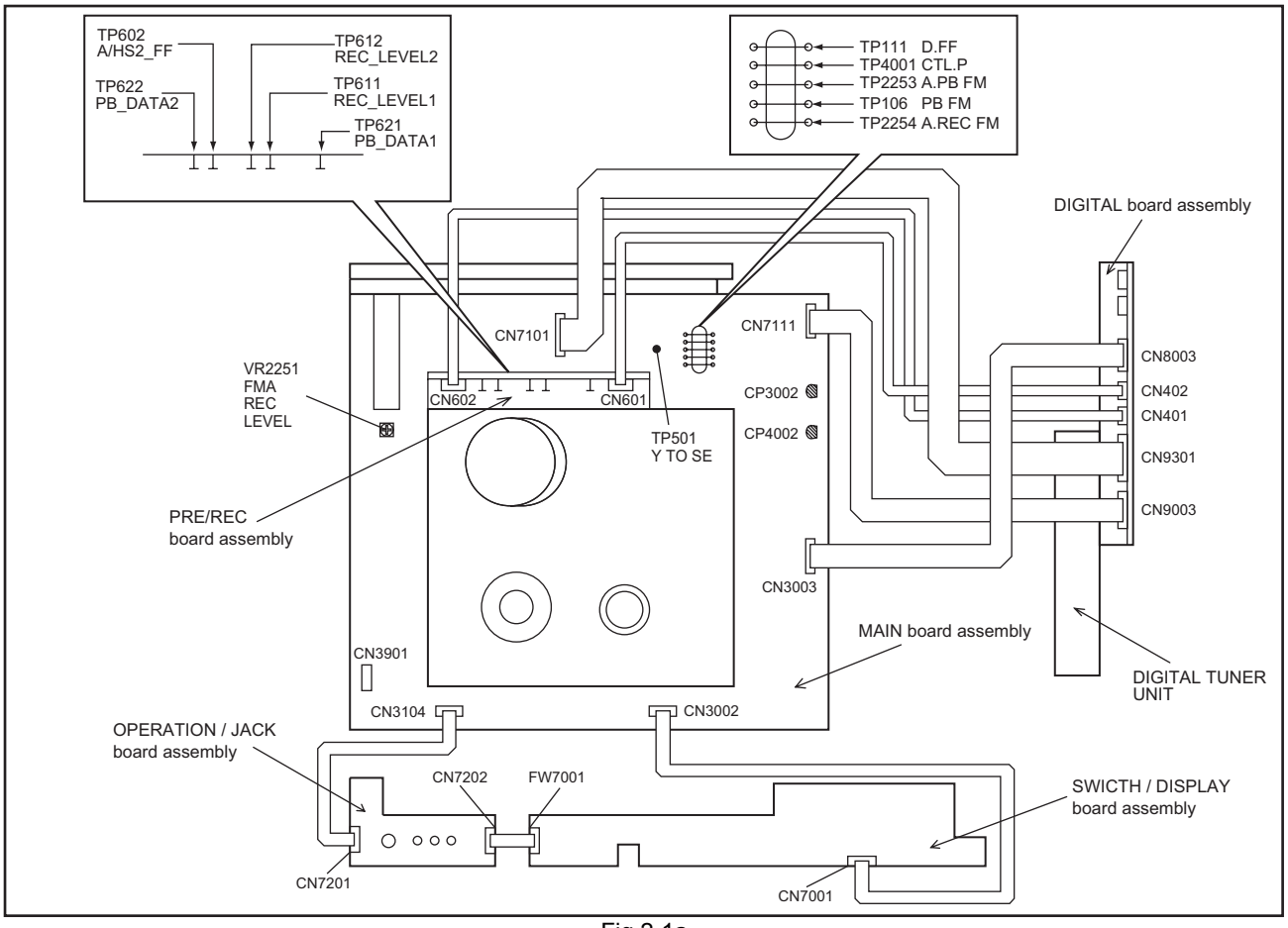


Fig.2-1a

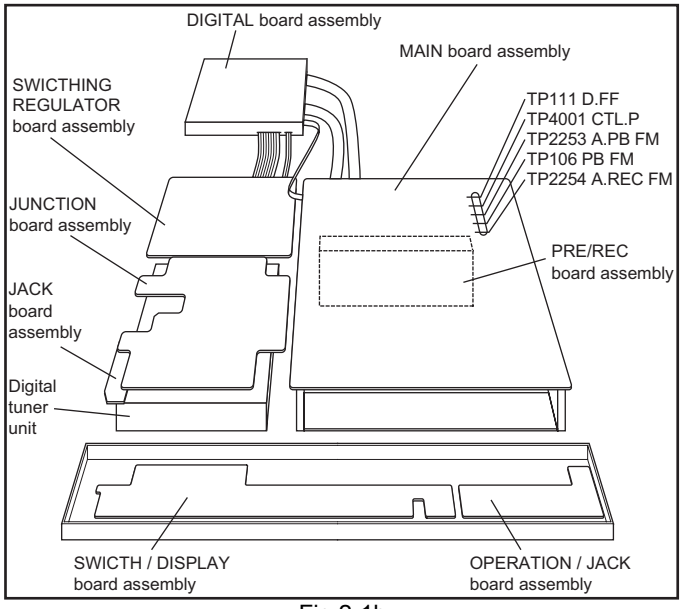


Fig.2-1b

2.2 Jig RCU mode

This unit uses the following two modes for receiving remote control codes.

(1) User RCU mode:Ordinary mode for use by the user.

(2) Jig RCU mode: Mode for use in production and servicing.

When using the Jig RCU, it is required to set the VCR to the Jig RCU mode (the mode in which codes from the Jig RCU can be received). As both of the above two modes are stored in the EEPROM, it is required to set the VCR back to the User RCU mode each time that an adjustment is made or to check that the necessary operations have been completed.These modes can be set by the operations described below.

Note:

- **Confirm the RCU mode when exchanged parts. Since some SERVICE PARTS sets the VCR to the Jig RCU mode as initial setting. Therefore please set the VCR to the user RCU mode after replacing the EEPROM.**

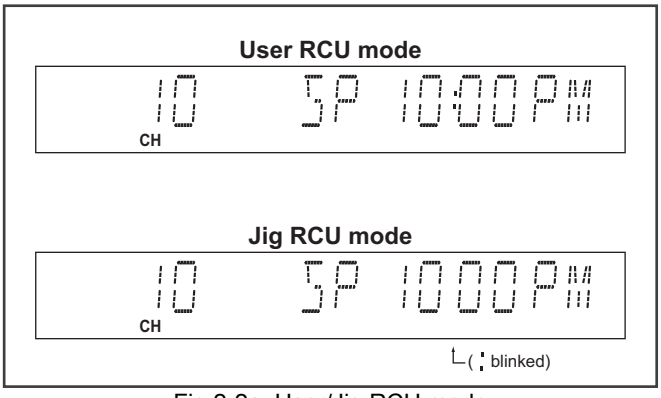


Fig.2-2a User/Jig RCU mode

2.2.1 Setting the Jig RCU mode

(1) Turn on the power.

(2) Press the following remocon keys continuously within 2 seconds " MENU " → " 2 " → " 8 " → " OK ".
When the VCR is set to the Jig RCU mode, the symbols (" : ") in the time display of the FDP are blinked.
(Refer to Fig.2-2a User/Jig RCU mode)

2.2.2 Setting the User RCU mode

(1) Turn off the power.

(2) Press the "REC" and "PAUSE" buttons of the VCR simultaneously. Alternatively, transmit the code "43-80" from the Jig RCU.

2.3 Mechanism service mode

This model has a unique function to enter the mechanism into every operation mode without loading of any cassette tape. This function is called the "Mechanism service mode".

2.3.1 How to set the "Mechanism service mode"

(1) Set the VCR to the Jig RCU mode (the mode in which codes from the Jig RCU can be received)

(2) Transmit the code "43-E5" from the Jig RCU.

(3) Release the lug of the Cassette holder and then slide the Cassette holder toward the direction where the Cassette holder is loaded by manually.

(4) The cassette holder lowers and, when the loading has completed, the mechanism enters the desired mode.
When the VCR is set to the Mechanism service mode, the symbols ("TIMER") in the FDP (LED) are blinked.

2.3.2 How to exit from the "Mechanism service mode"

(1) Unplug the power cord plug from the power outlet.

2.4 Maintenance and inspection

2.4.1 Cleaning

Regular cleaning of the transport system parts is desirable but practically impossible. So make it a rule to carry out cleaning of the tape transport system whenever the machine is serviced.
When the video head, tape guide and/or brush get soiled, the playback picture may appear inferior or at worst disappear, resulting in possible tape damage.

Note:

- **Absolutely avoid sweeping the upper drum vertically as this will cause damage to the video head.**

(1) When cleaning the upper drum (especially the video head), soak a piece of closely woven cloth with alcohol and while holding the cloth onto the upper drum by the fingers, turn the upper drum counterclockwise.

(2) To clean the parts of the tape transport system other than the upper drum, use a piece of closely woven cloth or a cotton swab soaked with alcohol.

(3) After cleaning, make sure that the cleaned parts are completely dry before using the cassette tape.

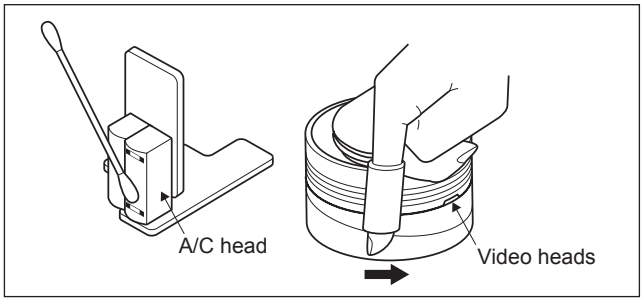


Fig.2-4a

2.4.2 Lubrication

With no need for periodical lubrication, you have only to lubricate new parts after replacement. If any oil or grease on contact parts is soiled, wipe it off and newly lubricate the parts.

Note:

- **See the "mechanism assembly" diagram of the "parts list" for the lubricating or greasing spots, and for the types of oil or grease to be used.**

2.4.3 Suggested servicing schedule for main components

The following table indicates the suggested period for such service measures as cleaning, lubrication and replacement. In practice, the indicated periods will vary widely according to environmental and usage conditions. However, the indicated components should be inspected when a set is brought for service and the maintenance work performed if necessary. Also note that rubber parts may deform in time, even if the set is not used.

System	Parts name	Operation hours	
		1000H	2000H
Tape transport	Drum assembly	C,X	X
	A/C head	C,X	C,X
	Pinch roller arm assembly	C	C
	Full erase head	C	C
	Tension arm assembly	C	C
	Capstan motor (Shaft)	C	C
	Guide arm assembly	C	C
Drive	Capstan motor		X
	Capstan brake assembly		X
	Main brake assembly		X
	Belt (Capstan)	X	X
	Loading motor		X
	Clutch unit		X
	Worm gear		X
	Control plate		X
Other	Rotary encoder		X

C : Cleaning
X : Inspection or Replacement if necessary

SECTION 3
DISASSEMBLY

3.1 Removing the major parts

3.1.1 Destination of connectors

Two kinds of double-arrows in connection tables respectively show kinds of connector/wires.

⇔ : Flat wire ↔ : Wire ⬌ : Board to board (B-B)

: The connector of the side to remove

CONN. No.	CONNECTOR					PIN No.
WR2a	Main	CN101	⇔	Digital	CN761	40
WR2b	Main	CN103	⇔	Digital	CN762	10

■ **Destination of connectors**

CONN. No.	CONNECTOR					PIN No.
WR2a	Main	CN3104	⇔	Operation jack	CN7201	13
WR2b	Main	CN3102	⇔	Switch display	CN7001	10
WR2c	Junction	CN5505	⇔	Switch display	CN7002	4
WR3a	PRE/REC	CN601	↔	Digital	CN401	4
WR3b	PRE/REC	CN602	↔	Digital	CN402	4
WR3c	Digital	CN911	↔	Jack	CN4106	6
WR3d	Digital	CN8002	↔	Junction	CN5504	12
WR3e	Digital	CN8001	↔	Switching regulator	CN5503	4
WR3f	Main	CN7111	⇔	Digital	CN9001	11
WR3g	Main	CN7107	⇔	Digital	CN9301	23
WR3h	Main	CN3003	⇔	Digital	CN8003	16
CN1901	Digital	CN1901	⬌	Digital tuner unit		110
WR4a	Junction	CN5502	↔	Digital tuner unit		5
WR4b	Junction	CN5503	↔	Digital tuner unit		8
WR5a	Switching regulator	CN5304	⬌	Junction	CN5501	15
WR5b	Switching regulator	CN5302	↔	Fan motor		2
WR5c	Switching regulator	CN5301	⬌	Main	CN3011	15
WR7a	Junction	CN5508	↔	Main	CN3101	2
WR9a	PRE/REC	CN604	⇔	Drum assembly		10
CN603 (CN3001)	PRE/REC	CN603	⬌	Main	CN3001	16
WR10a	Main	CN2001	⇔	A/C head		6
WR10b	Drum assembly		⇔	Capstan motor		7
WR10c	Main	CN1	⇔	Drum assembly		11

3.1.2 How to read the procedure table

This table shows the steps for disassembly of the externally furnished parts and board assemblies. Reverse these steps when re-assembling them.

Step/ Loc No.	Part Name	Fig. No.	Point	Note
[1]	Top cover	3-1a	4(S1a),(S1b),3(L1a), 2(SD1a),(P1a),(W1a), CN1(WR1a),	<Note 1a>
	Bracket		2(S1c)	

(1) (2) (3) (4) (5)

(1) Order of steps in Procedure
When reassembling, perform the step(s) in the reverse order.
These numbers are also used as the identification (location) No. of parts Figures.

(2) Part name to be removed or installed.

(3) Fig. No. showing procedure or part location.

(4) Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.
P= Spring, W= Washer, S= Screw, L= Locking tab, SD= Solder, CN**(WR**)= Remove the wire (WR**) from the connector (CN**).

Note:
- **The bracketed ( ) WR of the connector symbol are assigned nos. in priority order and do not correspond to those on the spare parts list.**

(5) Adjustment information for installation

3.1.3 Disassembly procedure

Step/ Loc No.	Part Name	Fig. No.	Point	Note
[1]	Top cover	3-1d	6(S1a)	
[2]	Front panel assembly (Operation jack board assembly) (Switch display board assembly)	3-1a 3-1d	3(L2a),5(L2b) CN3104(WR2a) ,CN3002(WR2b) ,CN5505(WR2c)	<Note2a> <Note2b>
[3]	Digital board assembly	3-1d	5(S3a),(S3b), CN601(WR3a), CN602(WR3b), CN911(WR3c), CN8002(WR3d), CN8001(WR3e), CN7111(WR3f), CN7107(WR3g), CN3003(WR3h), CN1901	<Note2a> <Note2a>
[4]	Digital tuner unit (HM-DT100US)	3-1d	4(S4a),CN5502(WR4a), CN5503(WR4b) COAXIAL(WR4c)	
[5]	Switching regulator board assembly	3-1d	3(S5a), CN5304(WR5a), CN5302(WR5b), CN5301(WR5c),	<Note2a>
[6]	Jack board assembly	3-1d	(S6a)	
[7]	Junction board assembly	3-1d	3(S7a),CN5508(WR7a)	
[8]	Rear cover	3-1d	6(S8a),(S8b),3(L8a)	
[9]	PRE/REC board assembly	3-1d	(S9a),(S9b) CN604(WR9a) CN603(CN3001)	<Note2a>
[10]	Mechanism assembly (Drum assembly) (Cleaner assembly) (Inertia plate) (Roller arm assembly)	3-1d	2(S10a),(S10b), CN2001(WR10a),(WR10b) CN1(WR10c), (S10c),(S10d),(S10e) 2(L10a) 4(L10b) (L10c),(P10a)	<Note2a> <Note3a> <Note3b> <Note3c>
[11]	Main board assembly	3-1d	3(S11a)	

<Note 2a>
- Be careful not to damage the connector and wire etc. during connection and disconnection.
- When connecting the flat wire to the connector, be careful with the flat wire direction.

<Note 2b>
- When reattaching the Front panel assembly, make sure that the door opener of the Side frame (R) is lowered in position prior to the reinstallation.

- When reattaching the Front panel assembly, pay careful attention to the switch lever of the Front panel assembly not to make it touch the switch knob of the Main board assembly from the side.
- When reattaching the Front panel assembly, lift the Cassette door slightly.

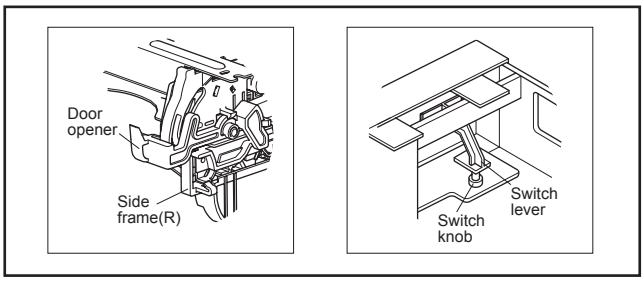


Fig.3-1a

<Note 3a>

- When reattaching the Mechanism assembly, secure the screws (S10a to S10b) in the order of a,b.

<Note 3b>

- When reattaching the Mechanism assembly, be sure to align the phase of the Rotary encoder on the Main board assembly.
- When reattaching the Mechanism assembly, set the “Mechanism assembling mode”. [See “MECHANISM ASSEMBLY SERVICE MANUAL (No. 86700)”.]
- When reattaching the Mechanism assembly to the Main board assembly, take care not to damage the sensors and switch on the Main board assembly.

<Note 3c>

- When reattaching the Drum assembly, secure the screws (S10c to S10e) in the order of c, d, e.

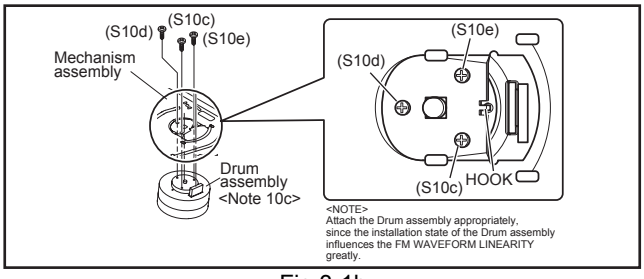


Fig.3-1b

- When handling the drum assembly alone, hold it by the motor or shaft. Be careful not to touch other parts, especially the video heads. Also take care not to damage the connectors.

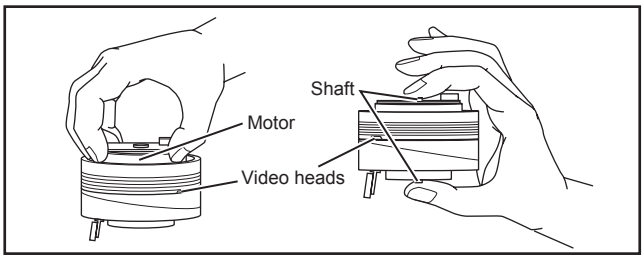


Fig.3-1c

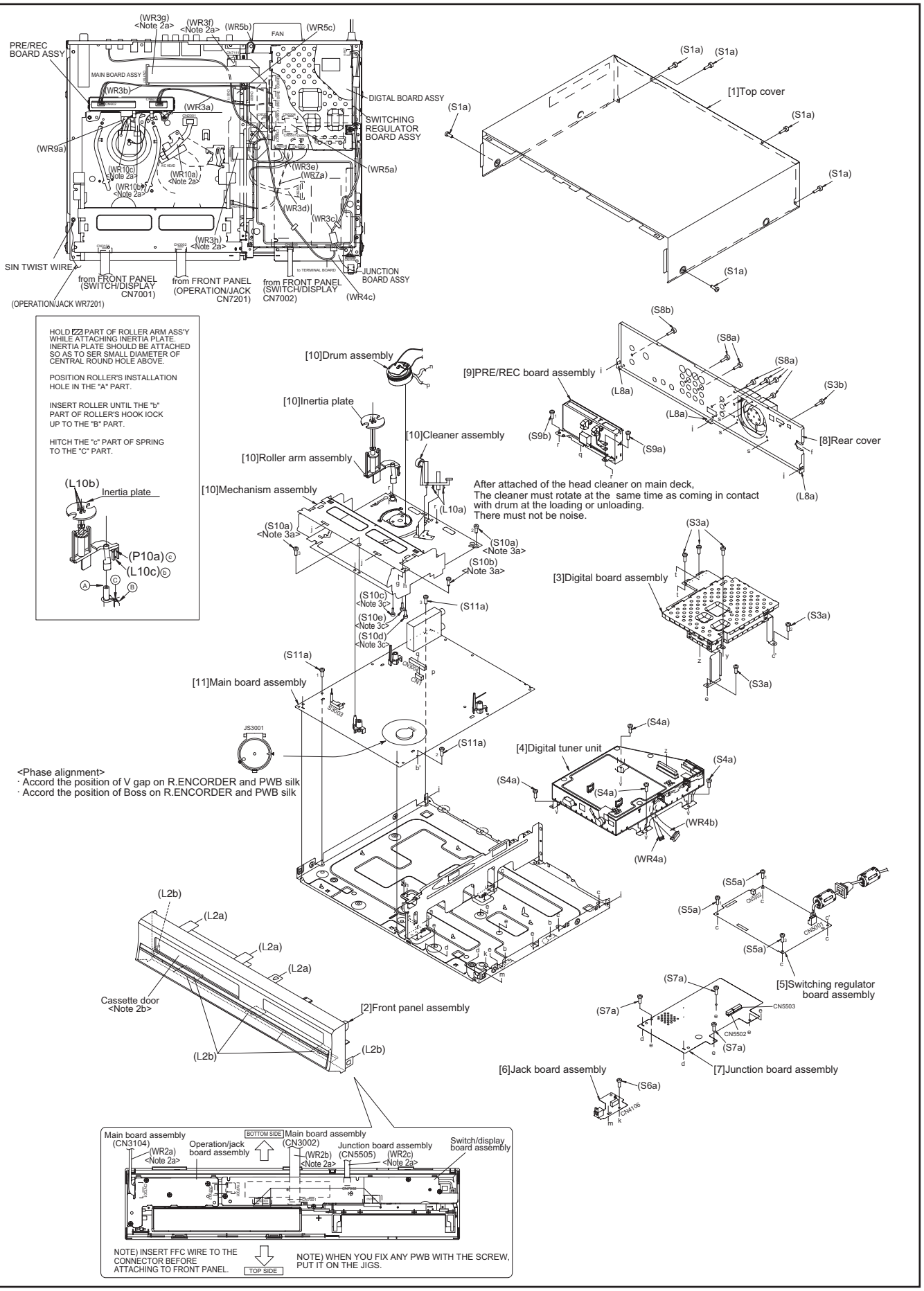

PRE/REC BOARD ASSY
(WR3g) <Note 2a>
(WR3f) <Note 2a>
(WR5b)
FAN
(WR5c)
DIGTAL BOARD ASSY
SWITCHING REGULATOR BOARD ASSY
(WR3b)
(WR3a)
(WR9a)
(WR10c) <Note 2a>
(WR10a) <Note 2a>
(WR10b) <Note 2a>
(WR3e)
(WR3f)
(WR5a)
(WR3d)
(WR3c)
(WR3h) <Note 2a>
SIN TWIST WIRE
from FRONT PANEL (SWITCH/DISPLAY CN7001)
from FRONT PANEL (OPERATION/JACK CN7201)
from FRONT PANEL (SWITCH/DISPLAY CN7002)
JUNCTION BOARD ASSY
(WR4c)
(OPERATION/JACK WR7201)
(S1a)
[1]Top cover
HOLD PART OF ROLLER ARM ASS'Y WHILE ATTACHING INERTIA PLATE. INERTIA PLATE SHOULD BE ATTACHED SO AS TO SER SMALL DIAMETER OF CENTRAL ROUND HOLE ABOVE.
POSITION ROLLER'S INSTALLATION HOLE IN THE "A" PART.
INSERT ROLLER UNTIL THE "b" PART OF ROLLER'S HOOK IOCK UP TO THE "B" PART.
HITCH THE "c" PART OF SPRING TO THE "C" PART.
(L10b)
Inertia plate
(P10a)
(L10c)
[10]Drum assembly
[10]Inertia plate
[10]Cleaner assembly
[10]Roller arm assembly
[10]Mechanism assembly
(L10a)
(S10a) <Note 3a>
(S10b) <Note 3a>
(S10c) <Note 3c>
(S10e) <Note 3c>
(S10d) <Note 3c>
(S11a)
[11]Main board assembly
JS3001
<Phase alignment>
· Accord the position of V gap on R.ENCORDER and PWB silk
· Accord the position of Boss on R.ENCORDER and PWB silk
[9]PRE/REC board assembly
(S8b)
(S8a)
(L8a)
(S3b)
(S9b)
(S9a)
[8]Rear cover
After attached of the head cleaner on main deck,
The cleaner must rotate at the same time as coming in contact with drum at the loading or unloading.
There must not be noise.
[3]Digital board assembly
(S3a)
[4]Digital tuner unit
(S4a)
(WR4b)
(WR4a)
(L2b)
(L2a)
Cassette door <Note 2b>
[2]Front panel assembly
(S5a)
[5]Switching regulator board assembly
CN5501
CN5504
(S7a)
CN5503
CN5502
[7]Junction board assembly
[6]Jack board assembly
(S6a)
CN4106
Main board assembly (CN3104)
(WR2a) <Note 2a>
Operation/jack board assembly
BOTTOM SIDE
Main board assembly (CN3002)
(WR2b) <Note 2a>
Junction board assembly (CN5505)
(WR2c) <Note 2a>
Switch/display board assembly
NOTE) INSERT FFC WIRE TO THE CONNECTOR BEFORE ATTACHING TO FRONT PANEL.
TOP SIDE
NOTE) WHEN YOU FIX ANY PWB WITH THE SCREW, PUT IT ON THE JIGS.

Fig.3-1d

SECTION 4
ADJUSTMENT

4.1 Before adjustment

4.1.1 Precaution

- **The adjustments of this unit include the mechanism compatibility and electrical adjustments. During the performance of this work, be sure to observe the precautions for each type of adjustment.**
- **If there is a reference to a signal input method in the signal column of the adjustment chart, "Ext. S-input" means the Y/C separated video signal and "Ext. input" means the composite video signal input.**
- **Unless otherwise specified, all measuring points and adjustment parts are located on the Main board.**

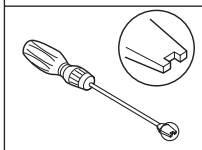
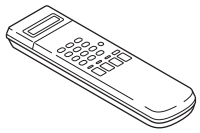
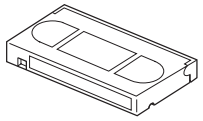
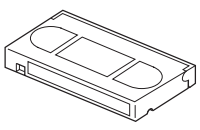
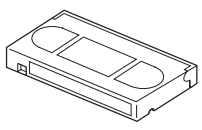
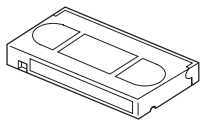
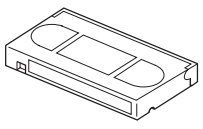
4.1.2 Required test equipments

- Color (colour) television or monitor
- Oscilloscope: wide-band, dual-trace, triggered delayed sweep
- Signal generator: RF / IF sweep / marker
- Signal generator: stairstep, color (colour) bar [NTSC]
- Recording tape
- Digit-key remote controller(provided)

4.1.3 Required adjustment tools

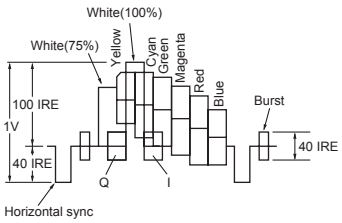
● : Used --- : Not used

	Mechanism compatibility adjustment	Electrical adjustment
Roller driver	●	---
Jig RCU	---	●
Back tension cassette gauge	●	---
Alignment tape(MHP)	●	---
Alignment tape(MHP-L)	●	●
Alignment tape(MD-1)	---	●
Alignment tape(MD-1H)	---	●

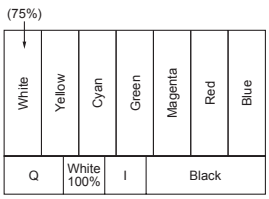
Roller driver PTU94002	Jig RCU PTU94023B	Back tension cassette gauge PUJ48076-2
		
Alignment tape (SP, stairstep, NTSC) MHP	Alignment tape (EP, stairstep, NTSC) MHP-L	Alignment tape (D-VHS STD color (colour) bar) MD-1
		
Alignment tape (D-VHS HS, color (colour) bar) MD-1H		
		

4.1.4 Color (colour) bar signal,Color (colour) bar pattern

• Color(colour) bar signal [NTSC]



• Color(colour) bar pattern [NTSC]



4.1.5 Switch settings

When adjusting this unit, set the VCR mode and switches as described below.

- When using the Jig RCU, it is required to set the VCR to the Jig RCU mode (the mode in which codes from the Jig RCU can be received). (See "section 2 SPECIFIC SERVICE INSTRUCTIONS".)

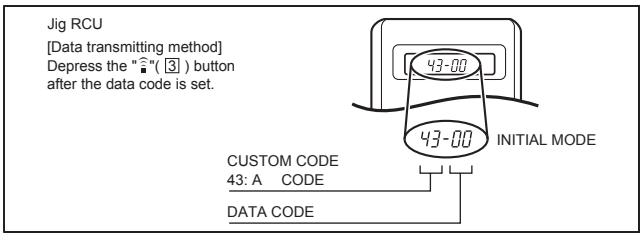


Fig.4-1 Jig RCU [PTU94023B]

- Set the switches as shown below unless otherwise specified on the relevant adjustment chart. The switches that are not listed below can be set as desired.
  If the VCR is not equipped with the functions detailed below, setup is not required.

AUTO PICTURE/VIDEO CALIBRATION/ B.E.S.T./D.S.P.C.	OFF
PICTURE CONTROL/SMART PICTURE	NORMAL/NATURAL
VIDEO STABILIZER	OFF
TBC	ON
Digital 3R	ON
VIDEO NAVIGATION/TAPE MANAGER	OFF
BLUE BACK	OFF

4.1.6 Manual tracking mode (Auto tracking ON/OFF) setting

(1) In order to set to the manual tracking mode during tape playback, press the "CHANNEL + and - "button on the front panel at the same time.
  • When the manual tracking mode is set, the tracking is placed at the center position.

(2) Press "CHANNEL +/-" to adjust the tracking manually.

4.1.7 EVR Adjustment

Some of the electrical adjustments require the adjustment performed by the EVR system. The main unit have EEPROMs for storing the EVR adjustment data and user setups.

Notes:

- **In the EVR adjustment mode, the value is varied with the channel buttons (+, -). The adjusted data is stored when the setting mode changes (from PB to STOP, when the tape speed is changed, etc.). Take care to identify the current mode of each adjustment item when making an adjustment.**

- **When changing the address setting in the EVR adjustment mode, use the Jig RCU or the remote controller having numeric keypad with which a numeric code can be directly input.**
  The remote control code of the Jig RCU corresponds to each of the digit keys on the remote controller as follows.

Digit-key	0	1	2	3	4	5	6	7	8	9
Code	20	21	22	23	24	25	26	27	28	29

- **As the counter indication and remaining tape indication are not displayed FDP during the EVR adjustment mode, check them on the TV monitor screen.**
- **When performing the EVR adjustment, confirm that the FDP indication is changed to the EVR mode.**

4.2 Mechanism compatibility adjustment

Notes:

- **Although compatibility adjustment is very important, it is not necessary to perform this as part of the normal servicing work. It will be required when you have replaced the A/C head, drum assembly or any part of the tape transport system.**
- **To prevent damaging the alignment tape in the compatibility adjustment, prepare a cassette tape (for self-recording/playback), perform a test on it by transporting it and making sure that the tape is not bent by the tape transport mechanisms such as in the guide rollers.(See Fig.4-2b.)**

4.2.1 Tension pole position

Notes:

- **This adjustment must be performed every time the tension band is replaced.**

Signal	(A)	• Back tension cassette gauge [PUJ48076-2]
Mode	(B1) (B2)	• PB • Eject end
Adjustment part	(F)	• Adjust pin [Mechansim assembly]
Specified value	(G)	• 25 - 51 gf•cm (2.45 - 5 x 10^{-3} Nm)

(1) Play back the back tension cassette gauge (A).
(2) Check that the indicated value on the left side gauge is within the specified value (G).
(3) If the indicated value is not within the specified value (G), perform the adjustment in a following procedure.(See Fig.4-2a.)
  a) Remove the top frame, cassette holder and side frames (L/R) all together. (Refer to the SERVICE MANUAL No.86700 [MECHANISM ASSEMBLY].)
  b) Rotate the loading motor gear to move the control plate so that the triangular stamping to the left of the “P”stamping is aligned with the stamping (a) on the main deck. This positioning is mode (B1).
  c) Adjust by turning the adjustment pin so that the tip of the tension arm is aligned with the stamping (b) on the main deck.
  d) Rotate the reel disk (S) by about one turn clockwise and make sure that the round hole of the adjustment pin is located in the “OK” range. If it is outside this range, restart the adjustment from the beginning.

  After completion of the adjustment, rotate the loading gear motor to return it to the mode (B2) position.

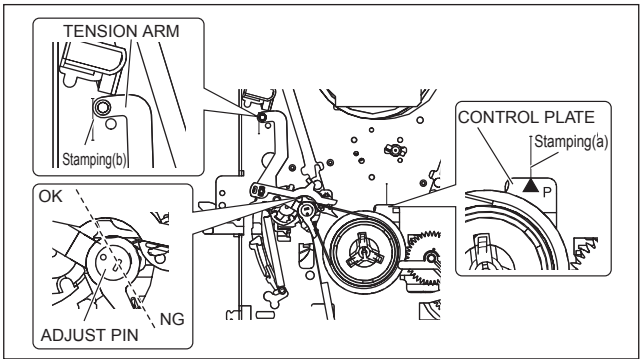


Fig.4-2a

4.2.2 FM waveform linearity

Signal	(A1) (A2)	• Alignment tape(SP, stairstep, NTSC) [MHP] • Alignment tape(EP,stairstep,NTSC) [MHP-L]
Mode	(B)	• PB
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• TP106 (PB. FM)
External trigger	(E)	• TP111 (D.FF)
Adjustment part	(F)	• Guide roller [Mechanism assembly]
Specified value	(G)	• Flat V.PB FM waveform
Adjustment tool	(H)	• Roller driver [PTU94002]

(1) Play back the alignment tape (A1).
(2) Apply the external trigger signal to D.FF (E), to observe the V.PB FM waveform at the measuring point (D).
(3) Set the VCR to the manual tracking mode.
(4) Make sure that there is no significant level drop of the V.PB FM waveform caused by the tracking operation, with its generally parallel and linear variation ensured. Perform the following adjustments when required. (See Fig. 4-2c.)
(5) Reduce the V.PB FM waveform by the tracking operation. If a drop in level is found on the left side, turn the guide roller of the pole base assembly (supply side) with the roller driver to make the V.PB FM waveform linear.
  If a drop in level is on the right side, likewise turn the guide roller of the pole base assembly (take-up side) with the roller driver to make it linear. (See Fig. 4-2c.)
(6) Make sure that the V.PB FM waveform varies in parallel and linearly with the tracking operation again. When required, perform fine-adjustment of the guide roller of the pole base assembly (supply or take-up side).
(7) Unload the cassette tape once, play back the alignment tape (A1) again and confirm the V.PB FM waveform.
(8) After adjustment, confirm that the tape wrinkling does not occur at the roller upper or lower limits. (See Fig. 4-2b.) [Perform adjustment step (9) only for the models equipped with SP mode and EP (or LP) mode.]

  [Perform adjustment step (9) only for the models equipped with SP mode and EP (or LP) mode.]
(9) Repeat steps (1) to (8) by using the alignment tape (A2).

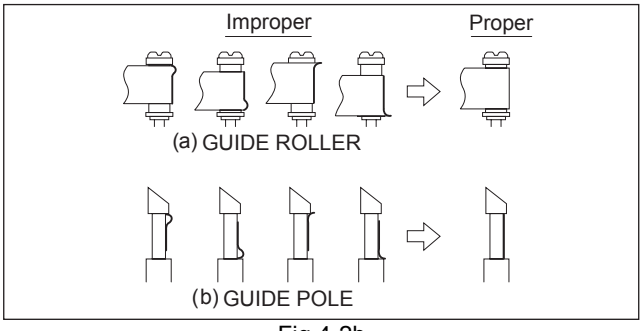


Fig.4-2b

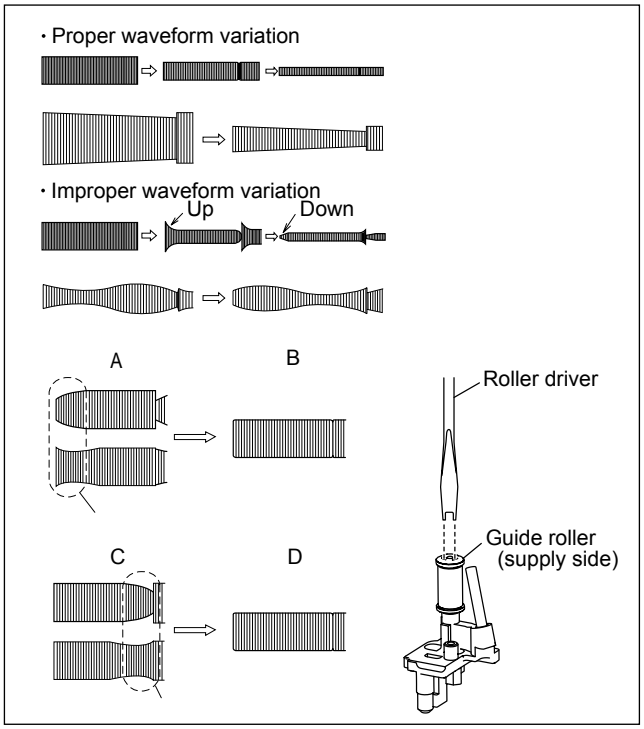


Fig.4-2c

4.2.3 Height and tilt of the A/C head

Note:

- **Set a temporary level of the height of the A/C head in advance to make the adjustment easier after the A/C head has been replaced. (Refer to the SERVICE MANUAL No.86700 [MECHANISM ASSEMBLY].)**

Signal	(A)	• Alignment tape(SP, stairstep, NTSC) [MHP]
Mode	(B)	• PB
Equipment	(C)	• Oscilloscope
Measuring point	(D1) (D2)	• TP106 (PB. FM) • TP4001 (CTL. P)
External trigger	(E)	• TP111 (D.FF)
Adjustment part	(F)	• A/C head [Mechanism assembly]
Specified value	(G)	• Maximum waveform

(1) Play back the alignment tape (A).
(2) Apply the external trigger signal to D.FF (E), to observe the AUDIO OUT waveform and Control pulse waveform at the measuring points (D1) and (D2) in the ALT mode.
(3) Set the VCR to the manual tracking mode.
(4) Adjust the AUDIO OUT waveform and Control pulse waveform by turning the screws (1), (2) and (3) little by little until both waveforms reach maximum. The screw (1) and (3) are for adjustment of tilt and the screw (2) for azimuth.

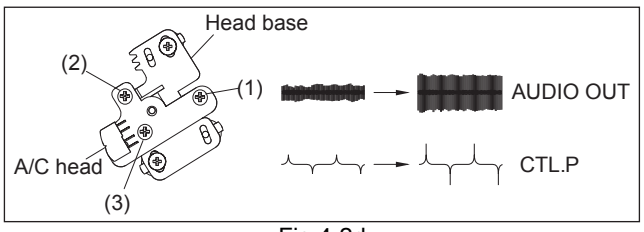


Fig.4-2d

4.2.4 A/C head phase (X-value)

Signal	(A1) (A2)	• Alignment tape(SP, stairstep, NTSC) [MHP] • Alignment tape(EP,stairstep,NTSC) [MHP-L]
Mode	(B)	• PB
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• TP106 (PB. FM)
External trigger	(E)	• TP111 (D.FF)
Adjustment part	(F)	• A/C head base [Mechanism assembly]
Specified value	(G)	• Flat V.PB FM waveform
Adjustment tool	(H)	• Roller driver [PTU94002]

(1) Play back the alignment tape (A1).
(2) Apply the external trigger signal to D.FF (E), to observe the V.PB FM waveform at the measuring point (D).
(3) Set the VCR to the manual tracking mode.
(4) Loosen the screws (4) and (5), then set the Roller driver to the innermost projected part of the A/C head. (See Fig. 4-2e.)
(5) Rotate the roller driver so that the A/C head comes closest to the capstan. From there, move the A/C head back gradually toward the drum until the point where the FM waveform is maximized for the second time, and then tighten the screws (4) and (5) temporarily.
(6) Play an alignment tape (A2) and set to the manual-tracking mode.
(7) Fine-adjust A/C head base position to maximize the FM waveform, and then tighten the screws (4) and (5) firmly.
(8) Play alignment tapes (A1) and (A2) and confirm that the FM waveforms are maximized when the tracking is at the center position.

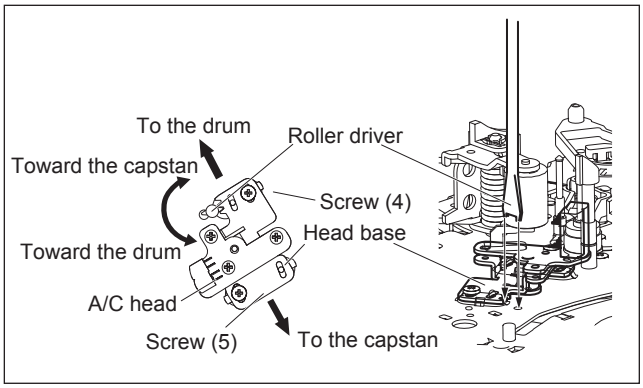


Fig.4-2e

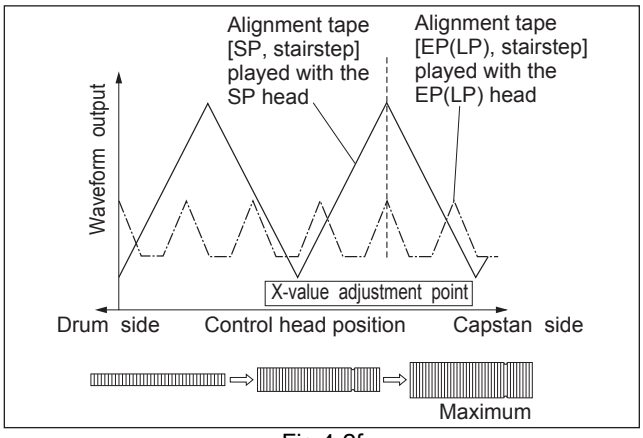


Fig.4-2f

4.3 Electrical adjustment

Note:

The following adjustment procedures are not only necessary after replacement of consumable mechanical parts or board assemblies, but are also provided as references to be referred to when servicing the electrical circuitry.

In case of trouble with the electrical circuitry, always begin a service by identifying the defective points by using the measuring instruments as described in the following electrical adjustment procedures. After this, proceed to the repair, replacement and/or adjustment. If the required measuring instruments are not available in the field, do not change the adjustment parts (variable resistor, etc.) carelessly.

4.3.1 Servo circuit

4.3.1.1 Switching point

Signal	(A1) (A2)	• Stairstep signal • Alignment tape (SP, stairstep, NTSC) [MHP]
Mode	(B)	• PB
Equipment	(C)	• Oscilloscope
Measuring point	(D1) (D2)	• TP501 (Y TO SE) [Main board] • TP106 (PB-FM) [Main board]
External trigger	(E)	• TP111 (D.FF)/slope : –
Adjustment part	(F1)	• Jig RCU: Code “43-51” or “43-52”
Specified value	(G)	• 7.5 ± 0.5H
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Play back the signal (A1) of the alignment tape (A2).
(2) Apply the external trigger signal to D.FF (E) to observe the VIDEO OUT waveform and V.PB FM waveform at the measuring points (D1) and (D2).
(3) Set the VCR to the manual tracking mode.
(4) Adjust tracking so that the V.PB FM waveform becomes maximum.
(5) Transmit the code (F1) from the Jig RCU to adjust so that the trigger point of the VIDEO OUT waveform is changed from the trailing edge of the V.sync signal becomes the specified value (G).
(6) Set the VCR to the stop mode.

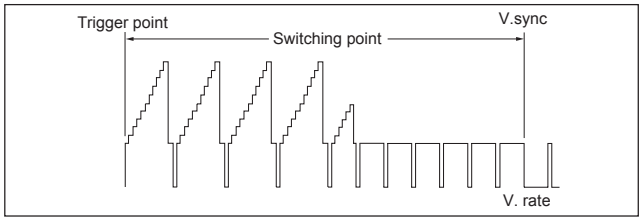


Fig.4-3a Switching point

4.3.1.2 D-VHS switching point

Signal	(A1) (A2) (A3)	• Color (colour) bar • (STD) Alignment tape [MD-1] • (HS) Alignment tape [MD-1H]
Mode	(B1) (B2) (B3)	• PB • D-VHS STD • D-VHS HS
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• (STD) TP621 (PB DATA1) • (HS) TP622 (PB DATA2)
External trigger	(E)	• (STD) TP111 (VIDEO/STD/HS1 FF) • (HS) TP602 (A/HS2 FF)
Adjustment part	(F)	• Jig RCU: Code “51” or “52”
Specified value	(G)	• 230 ± 20µsec
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Play back the signal (A1) of the alignment tape (A2).
(2) Apply the external trigger signal to D.FF (E) to observe the D-VHS envelope waveform at the measuring point (D).
(3) Set the VCR to the manual tracking mode.
(4) Adjust tracking so that the D-VHS envelope waveform becomes maximum.
(5) Transmit the code (F) from the Jig RCU to adjust so that the duration “a” from the waveform end (Hi/Low switching point of D.FF) to the rising edge of subcode area becomes the specified value (G).
(6) Set the VCR to the stop mode or eject mode.
(7) Play back the signal (A1) of the alignment tape (A3).
(8) Repeat steps (2) to (6) in the mode (B3).

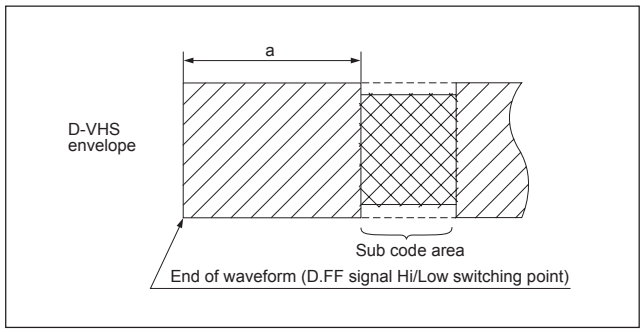


Fig.4-3b D-VHS switching point

4.3.1.3 Slow tracking preset

Signal	(A1) (A2)	• Ext. input • Color (colour) bar signal [NTSC]
Mode	(B1) (B2)	• VHS SP • VHS EP
Measuring point	(D)	• TV-Monitor
Adjustment part	(F)	• Jig code “43-71“ or 43-“72”
Specified value	(G)	• Minimum noise
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Record the signal (A2) in the mode (B1), and play back the recorded signal.
(2) Set the VCR to the manual tracking mode.
(3) Set the VCR to the FWD slow (+1/6x) mode.
(4) Transmit the code (F) from the Jig RCU to adjust so that the noise bar becomes the specified value (G) on the TV monitor in the slow mode.
(5) Set the VCR to the Stop mode.
(6) Confirm that the noise bar is (G) on the TV monitor in the slow mode.
(7) Repeat steps (3) to (6) in the REV slow (–1/6x) mode.
(8) Repeat steps (1) to (7) in the mode (B2).

Note:

- **For FWD slow (+1/6x) playback, transmit the code “43-08” from the Jig RCU to enter the slow playback mode, and transmit the code “43-D0” for REV slow (–1/6x) mode.**

4.3.2 Video circuit

4.3.2.1 SD EE COMPONENT Y level

Signal	(A1) (A2)	• Internal color bar • S-VHS
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• COMPONENT Y terminal
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “43-95” • "01 : **" • Jig code “43-21” • Jig code “43-18” or “43-19” (Channel +/-) • Jig code “43-3C”
Specified value	(G)	• 1.00 ± 0.02 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Insert the cassette tape (A2) to enter the mode (B).
(2) Observe the Y OUT waveform at the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(5) Transmit the code (F4) from the Jig RCU to adjust so that the Y level of the Y OUT waveform becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

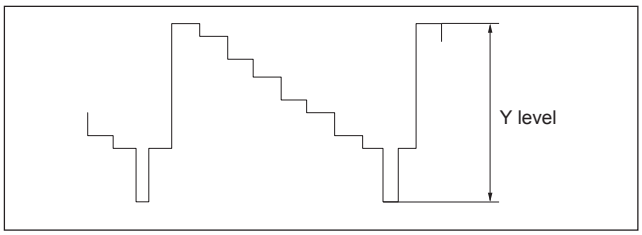


Fig.4-3c

4.3.2.2 SD EE COMPONENT CB level

Signal	(A1) (A2)	• Internal color bar • S-VHS
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• COMPONENT PB/CB terminal
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “43-95” • "06 : **" • Jig code “43-26” • Jig code “43-18” or “43-19” (Channel +/-) • Jig code “43-3C”
Specified value	(G)	• 0.70 ± 0.02 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Insert the cassette tape (A2) to enter the mode (B).
(2) Observe the CB OUT waveform at the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(5) Transmit the code (F4) from the Jig RCU to adjust so that the CB level of the CB OUT waveform becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

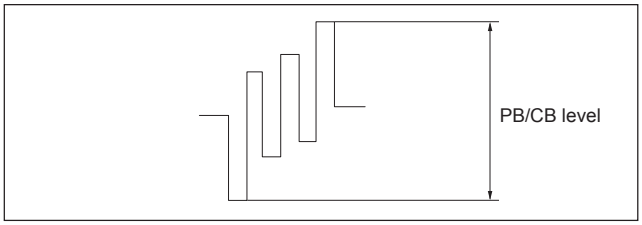


Fig.4-3d

4.3.2.3 EE COLOR (VHS) level

Signal	(A1) (A2)	• Internal color bar • VHS
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• C OUT (S terminal)
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “43-95” • "00 : **" • Jig code “43-20” • Jig code “43-18” or “43-19” (Channel +/-) • Jig code “43-3C”
Specified value	(G)	• 0.286 ± 0.01 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Insert the cassette tape (A2) to enter the mode (B).
(2) Observe the COLOR OUT waveform at the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(5) Transmit the code (F4) from the Jig RCU to adjust so that the BURST level of the COLOR OUT waveform becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

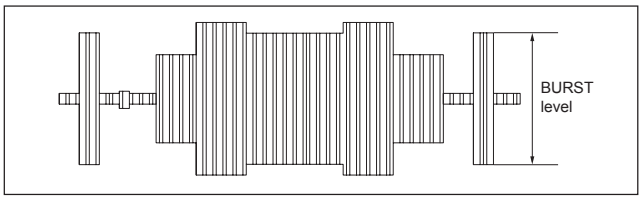


Fig.4-3e

4.3.2.4 EE Y (VHS) level

Signal	(A1) (A2) (A3)	• Ext. input • Color (colour) bar signal [NTSC] • VHS
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• TP501 (Y TO SE) [Main board]
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “43-95” • "03 : **" • Jig code “43-23” • Jig code “43-18” or “43-19” (Channel +/-) • Jig code “43-3C”
Specified value	(G)	• 0.52 ± 0.02 Vp-p
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Insert the cassette tape (A3) to enter the mode (B).
(2) Observe the Y OUT waveform at the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(5) Transmit the code (F4) from the Jig RCU to adjust so that the Y level of the Y OUT waveform becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

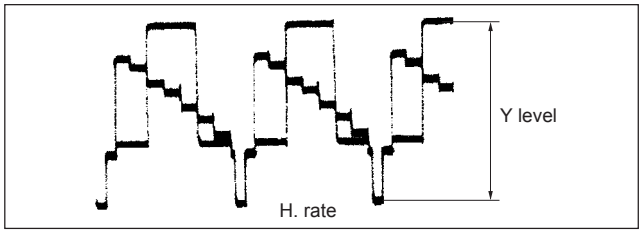


Fig.4-3f

4.3.3 Audio circuit

Note:
- **GND (Ground) should be taken from the Tuner shield case.**

4.3.3.1 Audio REC FM

Signal	(A1) (A2) (A3)	• Ext. input • Audio: No signal • Video: Color (colour) bar signal [NTSC]
Mode	(B)	• S-VHS EP
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• TP2253 (A. PB FM) [Main board]
External trigger	(E)	• TP111 (D.FF)
Adjustment part	(F)	• VR2251 (FMA REC LEVEL)
Specified value	(G1) (G2)	• 350 ± 50 mVp-p • More than 200 mVp-p

(1) Apply the external trigger signal to D.FF (E) to observe the Audio PB FM waveform at the measuring point (D).
(2) Record the signal (A3) with no audio signal input in the mode (B), and play back the recorded signal.
(3) Set the VCR to the manual tracking mode.
(4) If the A.PB FM level is not within the specified value (G1), perform the adjustment in a following procedure.
(5) Adjust the Adjustment part (F) so that the A. PB FM level of the higher channel level becomes the specified value (G1). (Adjust before recording, then confirm it by playing back.)
(6) If the specified value (G1) is not obtained, adjust the Adjustment part (F) so that the waveform level of the lower channel level becomes the specified value (G2). (Adjust before recording, then confirm it by playing back.)

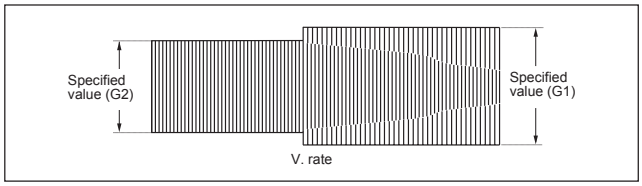


Fig.4-3g Audio REC FM

4.3.4 Digital circuit

4.3.4.1 HD EE COMPONENT Y level

Signal	(A1) (A2)	• Ext. input (i. LINK) • HD color bar signal
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• COMPONENT Y terminal
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “43-95” • "07 : **" • Jig code “43-27” • Jig code “43-18” or “43-19” (Channel +/-) • Jig code “43-3C”
Specified value	(G)	• 0.70 ± 0.02 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

Notes:
How to input the HD color bar signal.
- **Connect an i.LINK cable between the another playback VCR's i.LINK input/output connector and this VCR's i.LINK input/output connector.**
- **Select input location"I-1 etc." on this VCR.**
- **Playback the color bar portion of the alignment tape[MD-1H] on another playback VCR.**

(1) Input the signal (A2) to enter the mode (B).
(2) Observe the Y OUT waveform at the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(5) Transmit the code (F4) from the Jig RCU to adjust so that the Y level (a) of the Y OUT waveform becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

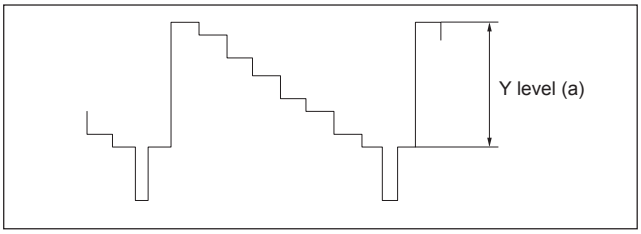


Fig.4-3h

4.3.4.2 HD EE COMPONENT CB level

Signal	(A1) (A2)	• Ext. input (i. LINK) • HD color bar signal
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• COMPONENT PB/CB terminal
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “43-95” • "08 : **" • Jig code “43-28” • Jig code “43-18” or “43-19” (Channel +/-) • Jig code “43-3C”
Specified value	(G)	• 0.525 ± 0.020 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

Notes:
How to input the HD color bar signal.

- **Connect an i.LINK cable between the another playback VCR's i.LINK input/output connector and this VCR's i.LINK input/output connector.**
- **Select input location"I-1 etc." on this VCR.**
- **Playback the color bar portion of the alignment tape[MD-1H] on another playback VCR.**

(1) Input the signal (A2) to enter the mode (B).
(2) Observe the PB/CB OUT waveform at the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(5) Transmit the code (F4) from the Jig RCU to adjust so that the PB/CB level of the PB/CB OUT waveform becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

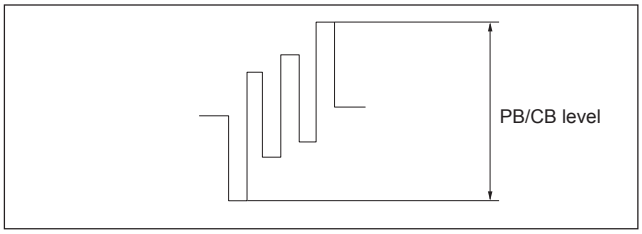


Fig.4-3i

4.3.4.3 D-VHS REC level

Signal	(A1) (A2) (A3)	• Ext. input • Optional • DF-300
Mode	(B1) (B2)	• D-VHS STD REC • D-VHS HS REC
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• (STD) TP611 (REC LEVEL1) • (HS) TP612 (REC LEVEL2)
External trigger	(E)	• (STD) TP111 (VIDEO/STD/HS1 FF) [Main board] • (HS) TP602 (A/HS2 FF)
Adjustment part	(F1) (F2) (F3) (F4)	• Jig code “43-57” • (STD) A:08 • (HS) A:09 • (STD) Jig code “43-28” • (HS) Jig code “43-29” • Jig code “43-18” or “43-19” (Channel +/-)
Specified value	(G)	• 0.105 ± 0.005Vp-p
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Insert the cassette tape (A3) to enter the mode (B1).
(2) Apply the external trigger signal to D.FF (E) to observe the waveform appeared at the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(5) Transmit the code (F4) from the Jig RCU to adjust so that the waveform signal level “a” becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)
(7) Repeat steps (2) to (6) in the mode (B2).

Notes:

- **GND (Ground) should be taken from the PRE/REC board shield case.**
- **The signal level adjustment should be performed by setting the center (centre) of the darkened section on the CRT bright line.**
- **After adjusting, always perform the confirmation and re-adjustment of the item 4.5.4.**

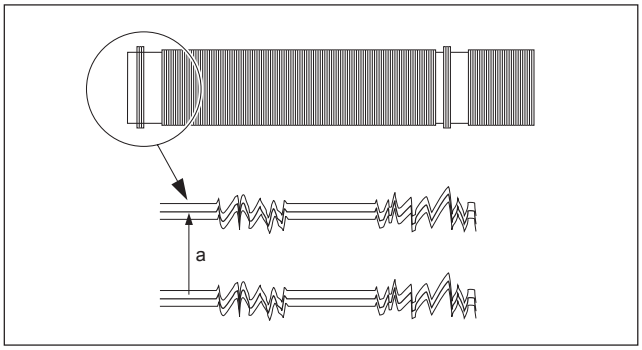


Fig.4-3j D-VHS REC level

4.3.4.4 PLL f0

Notes:

- **This adjustment should be done after the “D-VHS REC level adjustment” for the Digital circuit has been completed.**
- **Do not connect the probe or any other jig to the TP or shield case of the PRE/REC board during adjustment.**
- **If auto adjustment is not completed by the above procedure, re-adjust the adjustment item 4.3.4.3 again.**

Signal	(A1) (A2) (A3)	• Ext. input • Optional • DF-300
Mode	(B1) (B2)	• D-VHS STD • D-VHS HS
Adjustment part	(F1) (F2)	• (STD) Jig code “43-96” • (HS) Jig code “43-91” • Jig code “43-9B”
Specified value	(G)	• STOP mode
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Insert the cassette tape (A3) to enter the mode (B1).
(2) Set the VCR to the Auto adjust mode by transmitting the code (F1) from the Jig RCU. When the VCR enters the stop mode, the adjustment is completed. When the VCR enters the eject mode, insert the cassette tape again.
(3) Release the Auto adjust mode of the VCR by transmitting the code (F2) from the Jig RCU.
(4) Repeat steps (2) to (3) in the mode (B2).

SECTION 5
TROUBLESHOOTING

5.1 Manually removing the cassette tape

If you cannot remove the cassette tape which is loaded because of any electrical or mechanical failures, manually remove it by taking the following steps.

(1) Unplug the power cord plug from the power outlet.

(2) Refer to the disassembly procedure of the VCR and perform the disassembly of the major parts before removing the mechanism assembly. (See Fig. 5-1a)

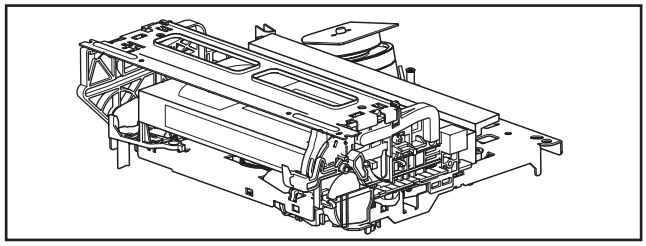


Fig.5-1a

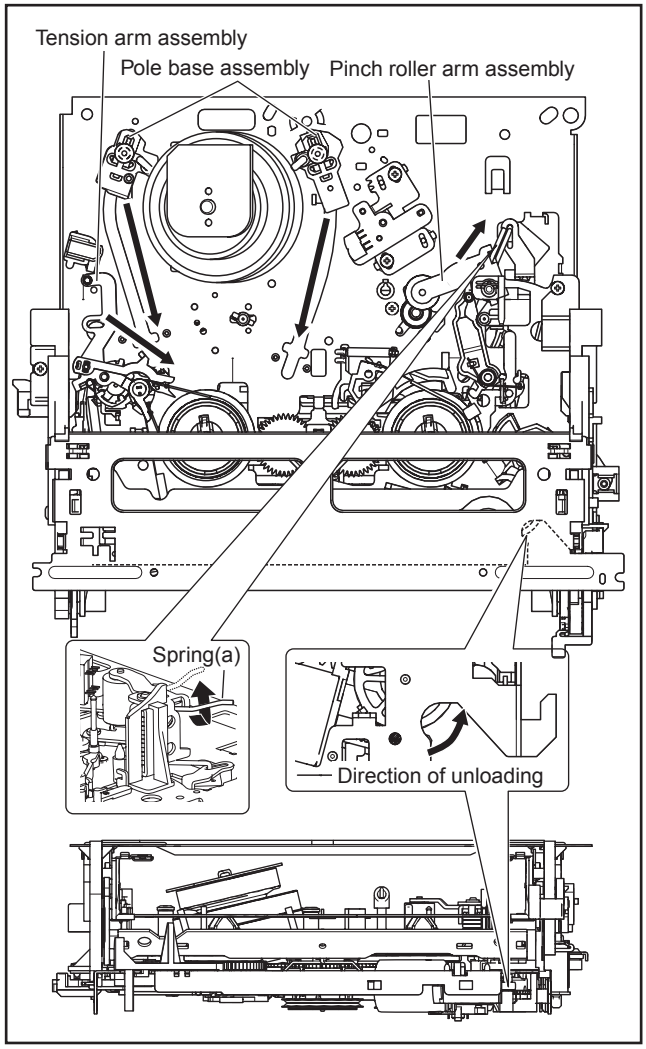


Fig.5-1b

(3) Unload the pole base assembly by manually turning the gear of the loading motor until the pole base assembly is hidden behind the cassette lid. In doing so, hold the tape by the hand to keep the slack away from any grease. (See Fig.5-1b)

In case of mechanical failures, while keeping the tension arm assembly free from tension, pull out the tape on the pole base assembly. Take the spring(a) of the pinch roller arm assembly off the hook, and detach it from the tape.

(4) Remove the screw (a) of the side frame (L/R).

(5) Hold the slack tape and cassette cover together, lift the cassette tape, top frame, cassette holder and side frames (L, R) together from the rear and remove them by dis-engaging the hooks (a) and (b).

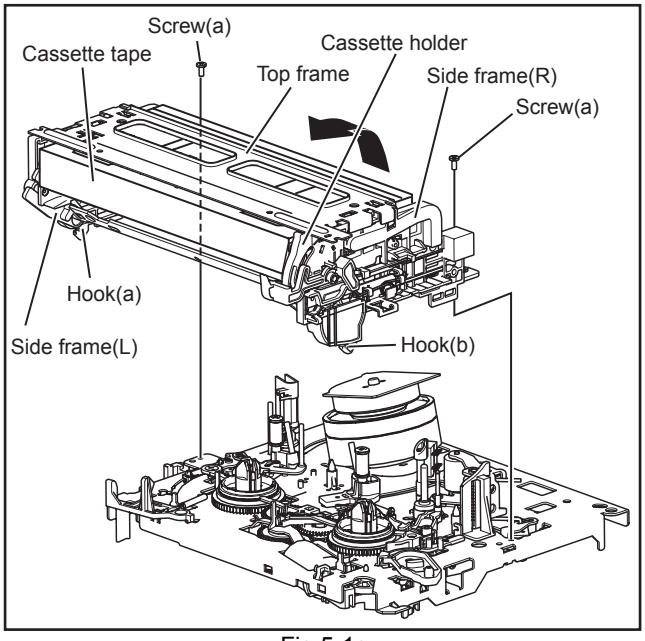


Fig.5-1c

(6) Take up the slack of the tape into the cassette. This completes removal of the cassette tape.

5.2 Emergency display function

This unit saves details of the last two emergencies as the EMG history and allows the status of the VCR and the mechanism of each emergency to be shown both on the display and as OSD information.

When using the emergency function, it is required to set the VCR to the Jig RCU mode.

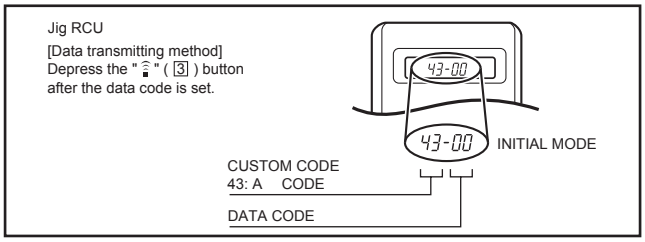


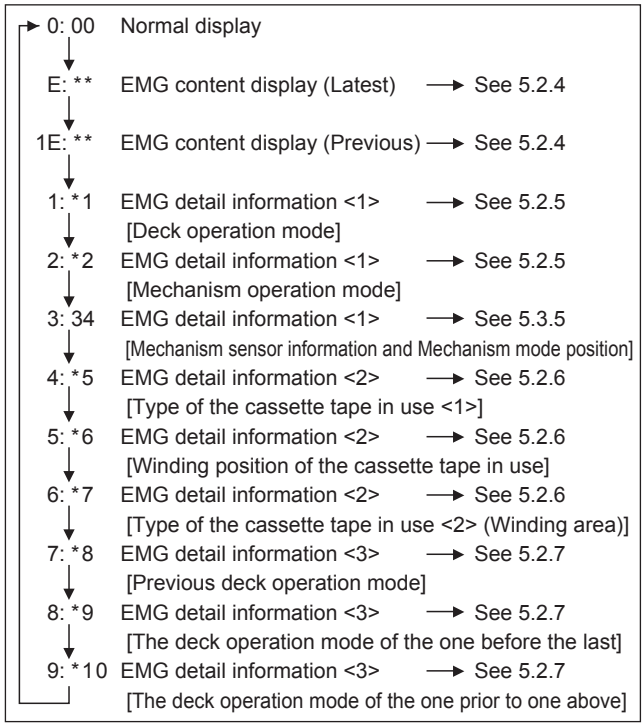
Fig.5-2a Jig RCU [PTU94023B]

5.2.1 Displaying the EMG information

The EMG detail of information can be displayed by transmitting the code "59" from the Jig RCU.

Note:

- **The EMG detail information <1><2> show the information on the latest EMG.**
  It becomes " - - : - - : - - " when there is no latest EMG record.


0: 00 Normal display
E: ** EMG content display (Latest) → See 5.2.4
1E: ** EMG content display (Previous) → See 5.2.4
1: *1 EMG detail information <1> → See 5.2.5
[Deck operation mode]
2: *2 EMG detail information <1> → See 5.2.5
[Mechanism operation mode]
3: 34 EMG detail information <1> → See 5.3.5
[Mechanism sensor information and Mechanism mode position]
4: *5 EMG detail information <2> → See 5.2.6
[Type of the cassette tape in use <1>]
5: *6 EMG detail information <2> → See 5.2.6
[Winding position of the cassette tape in use]
6: *7 EMG detail information <2> → See 5.2.6
[Type of the cassette tape in use <2> (Winding area)]
7: *8 EMG detail information <3> → See 5.2.7
[Previous deck operation mode]
8: *9 EMG detail information <3> → See 5.2.7
[The deck operation mode of the one before the last]
9: *10 EMG detail information <3> → See 5.2.7
[The deck operation mode of the one prior to one above]

EMG display of 7 FDP display model
Fig.5-2b

EMG display of FDP display mode

(1) Transmit the code “43-59” from the Jig RCU.
The FDP shows the EMG content in the form of “E:**:**”.

<Example 1> E : 01 ← Latest EMG

<Example 2> E : - - ← No EMG record

(2) Transmit the code “43-59” from the Jig RCU again.
The FDP shows the EMG detail information <1> in the form of “ *1: *2 : 34 ”.

*1 : Deck operation mode at the moment of EMG
*2 : Mechanism operation mode at the moment of EMG
3- : Mechanism sensor information at the moment of EMG
-4 : Mechanism mode position at the moment of EMG

(3) Transmit the code “43-59” from the Jig RCU once again.
The FDP shows the EMG detail information <2> in the form of “ *5 : *6 : *7 ”.

*5 : Type of the cassette tape in use <1> .
*6 : Winding position of the cassette tape in use
*7 : Type of the cassette tape in use <2> (Winding area)

(4) Transmit the code “43-59” from the Jig RCU once again.
The FDP shows the EMG detail information <3> in the form of “*8 : *9 : *10”.

*8 : Previous deck operation mode at the moment of EMG
*9 : The deck operation mode of the one before the last at the moment of EMG
*10: The deck operation mode of the one prior to one above at the moment of EMG

(5) Transmit the code “43-59” from the Jig RCU once again to reset the display.

5.2.2 Clearing the EMG history

(1) Display the EMG history.
(2) Transmit the code “43-36” from the Jig RCU.
(3) Reset the EMG display.

5.2.3 Details of the OSD display in the EMG display mode

During the EMG display, the OSD shows the data on the deck mode, etc. The details of the display contents are as follows.

Notes:

- **The display is variable depending on the part No. of the System Control microcomputer (IC3001) built into the VCR. In the following, refer to the figure carrying the same two characters as the top two characters of the part number of your IC.**
- **The sensor information in the OSD display contents is partially different from the mechanism sensor information in EMG detail information <1>.**

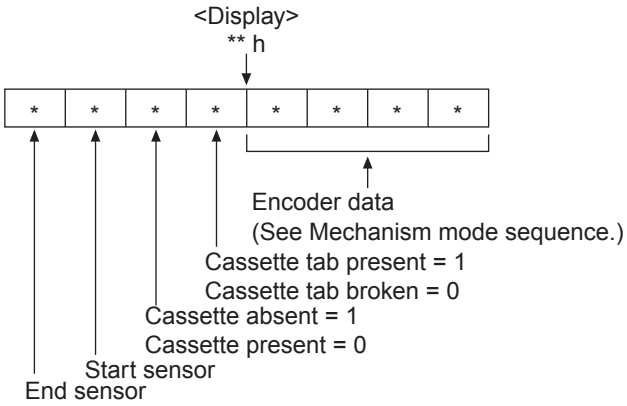
[For MN* only]

AA	BB	CC	DD	EE
FF	GG	HH	I I	J J
KK	L L	MM	NN	OO
PP	QQ	RR	SS	TT
UU	VV	WW	XX	YY

AA : Deck operation mode (See EMG detail information <1>.)
BB : Mechanism operation mode
(See EMG detail of information <1>.)
CC : Mechanism transition flag
DD : Capstan motor control status
EE : Loading motor control status
FF : Sensor information (See sensor information details.)
GG : Capstan motor speed
HH : Key code (JVC code)
I I : Supply reel winding diameter data higher 8 bits.
JJ : Supply reel winding diameter data lower 8 bits.
KK : Mechanism sensor information & mechanism mode position(See EMG detail of information <1>.)
LL : Tape speed data higher 8 bits.
MM : Tape speed data lower 8 bits.
NN : Cassette tape type <2> higher 8 bits.
(See EMG detail of information <2>.)
OO : Cassette tape type <2> lower 8 bits.
(See EMG detail of information <2>.)
PP : General data display area

YY : General data display area

***FF:Sensor information details**

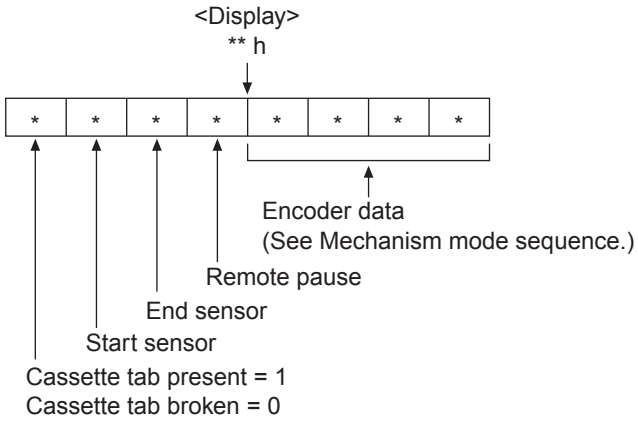


[For *HD only]

AA	BB	CC
DD	EE	FF
GGGG	HHHH	
I I	J J J J	
KKKK	L L L L	MMMM
ROM No.		

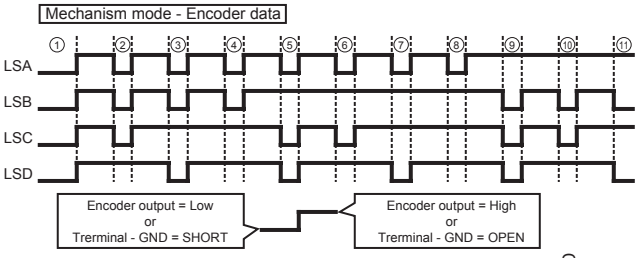
AA : Key code (JVC code)
BB : Deck operation mode(See EMG detail information <1>.)
CC : Mechanism operation mode (See EMG detail information <1>.)
DD : Sensor information (See sensor information details.)
EE : Capstan motor speed (Search, double speed)
FF : Tracking value
GGGG : Cassette tape type <2>, 16 bits.
(See EMG detail information <2>.)
HHHH : Supply reel winding diameter data
I I : Capstan motor speed (FF/REW, double speed)
JJJJ : Tape speed data, lower 8 bits.
KKKK : General data display area
LLLL : General data display area
MMMM : General data display area

***DD:Sensor information details**

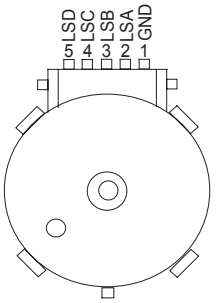


[For both MN*/HD*]

Mechanism mode sequence



No.	Position	Encoder data
①	EJECT	0 h = 0000
②	EJECT1	1 h = 0001
③	EJECT2	2 h = 0010
④	ULSTOP	3 h = 0011
⑤	UPPER	4 h = 0100
⑥	ONSTOP(PLAY)	5 h = 0101
⑦	FWD/SS	6 h = 0110
⑧	REV/SS	7 h = 0111
⑨	OFFSTOP	8 h = 1000
⑩	FFREW-BRAKE	9 h = 1001
⑪	FFREW	A h = 1010
⑫	MIDDLE	F h = 1111



5.2.4 EMG content description

Note:

EMG contents “E08 / E09” are for the model with Dynamic Drum (DD).

FDP	CONTENT	CAUSE
E01: Loading EMG	If the mechanism mode does not change to the next mode within 4 seconds after the loading motor starts rotating in the loading direction, while the mechanism is in the after-loading position (with the tape up against the pole base), [E:01] is identified and the power is switched OFF. However, if the tape loading is not completed within 4 seconds after the loading motor starts rotating in the loading direction, the tape is simply unloaded and ejected. No EMG data is recorded in this case.	1. The mechanism is locked in the middle of the mode transition during a tape loading operation. 2. The mechanism overruns during the tape loading operation because the SYSCON cannot recognize the mechanism mode normally. This problem is due to a cause such as a rotary encoder failure. 3. Power is not supplied to the loading MDA. (M12V/Vcc/Vref/ICP are disconnected in the middle.)
E02: Unloading EMG	When the mechanism mode cannot be changed to another mode even when the loading motor has rotated for more than 4 seconds in the unloading direction, [E:02] is identified and the power is turned off.	1. The mechanism is locked in the middle of mode transition. 2. Without an eject signal being sent from the SYSCON, unloading is attempted (i.e. Ejection is attempted while the tape is still inside the mechanism.) because the SYSCON cannot recognize the mechanism mode normally. This is due to a cause such as a rotary encoder failure. (Mechanism position: UPPER) 3. Power is not supplied to the loading MDA. (M12V/Vcc/Vref/ICP are disconnected in the middle.)
E03: Take Up Reel Pulse EMG	When the falling edje of the take-up reel pulse has not been generated for more than 4 seconds in the capstan rotating mode, [E:03] is identified, the pinch rollers are turned off and stopped, and the power is turned off. In this case, however, the mechanism should be in position after tape loading. Note that the reel EMG is not detected during Slow/Frame advance operations.	1. The take-up reel pulse is not generated in the FWD transport modes (PLAY/FWD SEARCH/FF, etc.) because; 1)The idler gear is not meshed with the take-up reel gear because the mechanism malfunctions for some reason. 2)The idler gear is meshed with the take-up reel gear, but incapable of winding due to too large mechanical load (abnormal tension); 3)The reel is rotating normally but an FG pulse is not generated due to the take-up reel sensor failure. 2. The supply reel pulse is not generated in the REV transport modes (REV SEARCH/REW, etc.) because; 1) The idler gear is not meshed with the supply reel gear because the mechanism malfunctions for some reason. 2) The idler gear is meshed with the supply reel gear, but incapable of winding due to too large a mechanical load (abnormal tension); 3) The reel rotates normally but the FG pulse is not generated due to a supply reel sensor failure. 3. Power(SW5V) is not supplied to the reel sensor on the tape winding side.
E04: Drum FG EMG	When the drum FG pulse has not been input for more than 3 seconds in the drum rotating mode, [E:04] is identified, the pinch rollers are turned off and stopped, and the power is turned off.	1. The drum could not start or the drum rotation has stopped due to too large a load on the tape, because; 1) The tape tension is abnormally high; 2) The tape is damaged or a foreign object (grease, etc.) adheres to the tape. 2. The drum FG pulse did not reach the System controller CPU because; 1) The signal circuit is disconnected in the middle; 2) The FG pulse generator (hall device) of the drum is faulty. 3. The drum control voltage (DRUM CTL V) is not supplied to the MDA. 4. Power (M12V) is not supplied to the drum MDA.
E05: Cassette Eject EMG	If the cassette does not reach the eject position within about 0.7 seconds after the cassette housing has started the cassette ejection operation, [E:05] is identified, the drive direction is reversed to load the tape, the mode is switched to STOP mode with the pinch roller OFF, and the power is switched OFF. During the cassette insertion process, the drive direction is reversed and the cassette is ejected if the tape is not up against the pole base within about 3 seconds after the start of the cassette pulling-in operation. If the cassette does not reach the eject position within about 0.7 seconds after the drive mode reversal operation, [E:05] is identified and the power is switched OFF immediately.	1. The cassette cannot be ejected due to a failure in the drive mechanism of the housing. 2. When the housing load increases during ejection, the loading motor is stopped because of lack of headroom in its drive torque. Housing load increasing factors: Temperature environment (low temperature, etc.), mechanism wear or failure. 3. The sensor/switch for detecting the end of ejection are not functioning normally. 4. The loading motor drive voltage is lower than specified or power (M12V) is not supplied to the motor (MDA). 5. When the user attempted to eject a cassette, a foreign object (or perhaps the user's hand) was caught in the opening of the housing.
E06: Capstan FG EMG	When the capstan FG pulse has not been generated for more than 1 second in the capstan rotating mode, [E:06] is identified, the pinch rollers are turned off and stopped, and the power is turned off.However, the capstan EMG is not detected in SLOW/STILL modes. Note that, if the part number of the System Control IC begins with "MN" or "M3", the capstan EMG is not detected even during the FF/REW operation.	1. The capstan could not start or the capstan rotation has stopped due to too large a load on the tape, because; 1) The tape tension is abnormally high (mechanical lock); 2) The tape is damaged or a foreign object (grease, etc.) is adhered to the tape (occurrence of tape entangling, etc.). 2. The capstan FG pulse did not reach the System controller CPU because; 1) The signal circuit is disconnected in the middle; 2) The FG pulse generator (MR device) of the capstans is faulty. 3. The capstan control voltage (CAPSTAN CTL V) is not supplied to the MDA. 4. Power (M12V, SW5V) are not supplied to the capstan MDA.
E07: SW Power Short-Circuit EMG	When short-circuiting of the SW power supply with GND has lasted for 0.5 second or more, [E:07] is identified, all the motors are stopped and the power is turned off.	1. The SW 5 V power supply circuit is shorted with GND. 2. The SW 12 V power supply circuit is shorted with GND.
E08: DD Initialized (Absolute Position Sensor) EMG	When DD tilting does not complete in 4 seconds, [E:08] is identified, the tilt motor is stopped and the power is turned off.	1. The absolute value sensor is defective. (The soldered parts have separated.) 2. The pull-up resistor at the absolute sensor output is defective. (The soldered parts have separated.) 3. Contact failure or soldering failure of the pins of the connector (board-to-board) to the absolute value sensor. 4. The absolute value sensor data is not sent to the System Controller CPU.
E09: DD FG EMG	When the DD FG pulse is not generated within 2.5 seconds, [E:09] is identified, the tilt motor is stopped and the power is turned off.	1. The FG sensor is defective. (The soldered parts have separated.) 2. The pull-up resistor at the FG sensor output is defective. (The soldered parts have separated.) 3. Contact failure or soldering failure of the pins of the connector (board-to-board) to the FG sensor. 4. The power (5V) to the sensor is not supplied. (Connection failure/soldering failure) 5. The FG pulse is not sent to the System Controller CPU. 6. The tilt motor is defective. (The soldered parts have separated.) 7. The drive power to the tilt motor is not supplied. (Connection failure/soldering failure) 8. The tilt motor drive MDA - IC is defective. 9. Auto-recovery of the DD tilting cannot take place due to overrun.
E0A: Supply Reel Pulse EMG	When the falling edge of the supply reel pulse has not been generated for more than 10 seconds in the capstan rotating mode, [E:0A] is identified and the cassette is ejected (but the power is not turned off). In this case, however, the mechanism should be in the position after tape loading (with the tape up against the pole base). Also note that the reel EMG is not detected during Slow/Frame advance operations.	1. The supply reel pulse is not generated in the FWD transport mode (PLAY/FWD SEARCH/FF, etc.) because; 1) PLAY/FWD or SEARCH/FF is started while the tape in the inserted cassette is cut in the middle; 2) A mechanical factor caused tape slack inside and outside the supply reel side of the cassette shell. In this case, the supply reel will not rotate until the tape slack is removed by the FWD transport, so the pulse is not generated until then; 3) The reel is rotating normally but the FG pulse is not generated due to a supply reel sensor failure. 2. The take-up reel pulse is not generated in the REV transport mode (REV SEARCH/REW, etc.). 1) REV SEARCH/REW is started when the tape in the inserted cassette has been cut in the middle; 2) A mechanical factor caused tape slack inside and outside the take-up reel side of the cassette shell. In this case, the take up will not rotate until the tape slack is removed by the REV transport, so the pulse will not be generated until that time; 3) The reel is rotating normally but the FG pulse is not generated due to a take-up reel sensor failure. 3. The power (SW 5V) to a reel sensor is not supplied.
EU1: Head clog warning history	Presupposing the presence of the control pulse output in the PLAY mode, when the value obtained by mixing the two V.FM output channels (without regard to the A.FM output) has remained below a certain threshold level for more than 10 seconds, [E:U1] is identified and recorded in the emergency history. During the period in which the head clog is detected, the FDP shows "U:01" and the OSD repeats the "3 seconds of warning display" and the "7 seconds of noise picture display" alternately. EMG code : "E:C1" or "E:U1" / FDP : "U:01" / OSD : "Try cleaning tape." or "Use cleaning cassette." The head clog warning is reset when the above-mentioned threshold has been exceeded for more than 2 seconds or the mode is changed to another mode than PLAY.	

5.2.5 EMG detail information <1>

The status (electrical operation mode) of the VCR and the status (mechanism operation mode/sensor information) of the mechanism in the latest EMG can be confirmed based on the figure in EMG detail information <1> .

[FDP/OSD display] *1 : *2 : 34

*1 : Deck operation mode at the moment of EMG
*2 : Mechanism operation mode at the moment of EMG
3- : Mechanism sensor information at the moment of EMG
-4 : Mechanism mode position at the moment of EMG

Note:

- **For EMG detailed information <1>, the content of the code that is shown on the display (or OSD) differs depending on the parts number of the system control microprocessor (IC3001) of the VCR. The system control microprocessor parts number starts with two letters, refer these to the corresponding table.**

***1 : Deck operation mode**

[Common table of MN* and HD]

Display		Deck operation mode
MN*	HD*	
00	-	Mechanism being initialized
01	00	STOP with pinch roller pressure off (or tape present with P.OFF)
02	01	STOP with pinch roller pressure on
03	-	POWER OFF as a result of EMG
04	04	PLAY (Normal playback)
0C	0E	REC
10	11	Cassette ejected
20	22	FF
21	-	Tape fully loaded, START sensor ON, short FF
22	-	Cassette identification FWD SEARCH before transition to FF (SPx7-speed)
24	26	FWD SEARCH (variable speed) including x2-speed
2C	2E	INSERT REC
40	43	REW
42	-	Cassette identification REV SEARCH before transition to REW (SPx7-speed)
44	47	REV SEARCH (variable speed)
4C	4C	AUDIO DUB
6C	6E	INSERT REC (VIDEO + AUDIO)
84	84	FWD STILL / SLOW
85	85	REV STILL / SLOW
8C	8F	REC PAUSE
8D	-	Back spacing
8E	-	Forward spacing (FWD transport mode with BEST function)
AC	AF	INSERT REC PAUSE
AD	-	INSERT REC back spacing
CC	CD	AUDIO DUB PAUSE
CD	-	AUDIO DUB back spacing
EC	EF	INSERT REC (VIDEO + AUDIO) PAUSE
ED	-	INSERT REC (VIDEO + AUDIO) back spacing

***2 : Mechanism operation mode**

[Table of MN*]

Display	Mechanism operation mode
00	Command standby (No command to be executed)
01	Immediate Power OFF after EMG occurrence
02	Loading from an intermediate position during mechanism initialization
03	Unloading due to EMG occurrence during mechanism initialization
04	Ejecting cassette (ULSTOP to EJECT)
05	Inserting cassette (EJECT to ULSTOP)
06	Loading tape (ULSTOP to PLAY)
07	Unloading tape (PLAY to ULSTOP)
08	Transition from pinch roller ON to STOP
09	Transition from pinch roller OFF to STOP (PLAY to OFFSTOP)
0A	Transition from pinch roller OFF to STOP at power OFF
0B	Transition from pinch roller ON to STOP at power ON
0C	Transition to PLAY
0D	Transition to Search FF
0E	Transition to REC
0F	Transition to FWD STILL/SLOW
10	Transition to REV STILL/SLOW
11	Transition to Search REV
12	Transition from FF/REW to STOP
13	Transition to FF
14	Transition to REW
15	Tape end detection processing during loading
16	Short FWD/REV at tape sensor ON during unloading
17	Transition to FF/REW brake mode

[Table of HD*]

Display	Mechanism operation mode
00	STOP with pinch roller pressure off
01	STOP with pinch roller pressure on
02	U/L STOP (or tape being loaded)
04	PLAY (Normal playback)
05	PLAY (x1-speed playback using JOG)
0E	REC
11	Cassette ejected
22	FF
26	FWD SEARCH (variable speed) including x2-speed
2E	INSERT REC
43	REW
47	REV SEARCH
4C	AUDIO DUB
6E	INSERT REC (VIDEO + AUDIO)
84	FWD STILL/SLOW
85	REV STILL/SLOW
8F	REC PAUSE
AF	INSERT REC PAUSE
C7	REV SEARCH (x1-speed reverse playback using JOG)
CD	AUDIO DUB PAUSE
EF	INSERT REC (VIDEO + AUDIO) PAUSE
F0	Mechanism being initialized
F1	POWER OFF as a result of EMG
F2	Cassette being inserted
F3	Cassette being ejected
F4	Transition from STOP with pinch roller pressure on to STOP with pinch roller pressure off
F5	Transition from STOP with pinch roller pressure on to PLAY
F6	Transition from STOP with pinch roller pressure on to REC
F7	Cassette type detection SEARCH before FF/REW is being executed
F8	Tape being unloaded
F9	Transition from STOP with pinch roller pressure off to STOP with pinch roller pressure on
FA	Transition from STOP with pinch roller pressure off to FF/REW
FB	Transition from STOP with pinch roller pressure off to REC.P (T.REC,etc.)
FC	Transition from STOP with pinch roller pressure off to cassette type detection SEARCH
FD	Short REV being executed after END sensor on during unloading
FE	Tension loosening being executed after tape loading (STOP with pinch roller pressure on)
FF	Tape being unloaded

3- : Mechanism sensor information

[Common table of MN* and HD*]

Display	Mechanism sensor informatio n			
	REC safety SW	Start sensor	End sensor	Mechansim position sensor
0-	Tab broken	ON	ON	ON
1-	Tab broken	ON	ON	OFF
2-	Tab broken	ON	OFF	ON
3-	Tab broken	ON	OFF	OFF
4-	Tab present	OFF	ON	ON
5-	Tab present	OFF	ON	OFF
6-	Tab present	OFF	OFF	ON
7-	Tab present	OFF	OFF	OFF
8-	Tab broken	ON	ON	ON
9-	Tab broken	ON	ON	OFF
A-	Tab broken	ON	OFF	ON
B-	Tab broken	ON	OFF	OFF
C-	Tab present	OFF	ON	ON
D-	Tab present	OFF	ON	OFF
E-	Tab present	OFF	OFF	ON
F-	Tab present	OFF	OFF	OFF
	Tab broken = 0 Tab present = 1	Sensor ON = 0 sensor OFF = 1	Sensor ON = 0 Sensor OFF = 1	

-4 : Mechanism mode position

[Common table of MN* and HD*]

Mechanism sensor information	Dis-play	Deck operation mode	
Even number (0, 2, 4, 6, 8, A, C, E)	-0	Not established	
	-1	EJECT	EJECT position
	-2	EJECT-EJECT1	Intermodal position
	-3	EJECT1	EJECT1 position
	-4	EJECT1-EJECT2	Intermodal position
	-5	EJECT2	EJECT2 position
	-6	EJECT2-ULSTOP	Intermodal position
	-7	ULSTOP	ULSTOP position
	-8	ULSTOP-UPPER	Intermodal position
	-9	UPPER	Loading (unloading) tape
	-A	UPPER-ONSTOP	Intermodal position
	-B	ONSTOP	PLAY position
	-C	PLAY-FWD/SS	Intermodal position
	-D	FWD/SS	FWD (FWD Still/Slow) position
	-E	FWD/SS-REV	Intermodal position
	-F	REV	REV (REV Still/Slow) position
Odd number (1, 3, 5, 7, 9, B, D, F)	-0	REV-OFFSTOP	Intermodal position
	-1	OFFSTOP	Pinch roller OFF position
	-2	OFFSTOP-FFREWB	Intermodal position
	-3	FFREWB	FF/REW Brake position
	-4	FFREWB-FFREW	Intermodal position
	-5	FFREW	FF/REW position

5.2.6 EMG detail information <2>

The type of the cassette tape and the cassette tape winding position can be confirmed based on the figure in EMG detail information <2> .

Note:

- **EMG detail information <2> is the reference information stored using the remaining tape detection function of the cassette tape. As a result, it may not identify cassette correctly when a special cassette tape is used or when the tape has variable thickness.**

***5 : Cassette tape type <1>**

Display	Cassette tape type <1>
00	Cassette type not identified
16	Large reel/small reel (T-0 to T-15/T-130 to T-210) not classified
82	Small reel, thick tape (T-120) identified/thin tape (T-140) identified
84	Large reel (T-0 to T-60) identified
92	Small reel, thick tape (T-130) identified/thin tape (T-160 to T-210) identified
93	Small reel, thick tape/C cassette (T-0 to T-100/C cassette) not classified
C3	Small reel, thick tape/C cassette (T-0 to T-100/C cassette) being classified
D3	Small reel, thick tape/C cassette (T-0 to T-100/C cassette) being classified
E1	C cassette, thick tape (TC-10 to TC-20) identified
E2	Small reel, thick tape (T-0 to T-100) identified
E9	C cassette, thin tape (TC-30 to TC-40) identified
F1	C cassette, thick tape/thin tape (TC-10 to TC-40) not classified

Notes:

- **Cassette tape type <1> is identified a few times during mode transition and the identification count is variable depending on the cassette tape type. If an EMG occurs in the middle of identification, the cassette tape type may not be able to be identified.**
- **If other value than those listed in the above table is displayed, the cassette tape type is not identified.**

***6 : Cassette tape winding position**

The cassette tape winding position at the moment of EMG is displayed by dividing the entire tape (from the beginning to the end) in 21 sections using a hex number from “00” to “14”.

00 : End of winding
14 : Beginning of winding
FF : Tape position not identified

***7 : Cassette tape type <2> (Winding area)**

Display	Cassette tape type <2>		(Reference) Word data (Beginning) (End)
00	Cassette type not identified		
04 - 08	C cassette, thick tape	TC-10	(0497 - 0506) (0732 - 0858)
05 - 06	Small reel, thick tape	T-20	(05A9 - 0661)
05 - 0C	C cassette, thick tape	TC-20P	(0599 - 05FF) (0AA1 - 0C07)
06 - 0C	C cassette, thin tape	TC-40	(0623 - 063D) (0C41 - 0CC3)
06 - 0C	C cassette, thin tape	TC-30	(0611 - 0638) (0C0C - 0CB2)
07 - 08	Small reel, thick tape	T-40	(07CC - 08E5)
09 - 0B	Small reel, thick tape	T-60	(09FD - 0B78)
0C - 0D	Small reel, thick tape	T-80(DF-160)	(0C20 - 0DFC)
0D - 0F	Small reel, thick tape	T-90(DF-180)	(0D31 - 0F3E)
0E - 10	Small reel, thick tape	T-100	(0E43 - 107F)
10 - 12	Small reel, thin tape	T-140	(10E1 - 120C)
10 - 13	Small reel, thick tape	T-120(DF-240)	(1073 - 1313)
11 - 14	Small reel, thick tape	T-130	(1185 - 1429)
12 - 14	Small reel, thin tape	T-160	(12D3 - 141F)
13 - 14	Small reel, thin tape	T-210(DF-420)	(1373 - 14C3)
13 - 14	Small reel, thin tape	T-180(DF-360)	(1357 - 14C0)
13 - 14	Small reel, thin tape	T-168	(1395 - 14EE)
13 - 14	Small reel, thick tape	DF-300	(13A8 - 14CE)
15 - 16	Large reel	T-20	(1536 - 1618)
16 - 17	Large reel	T-30	(1647 - 175A)
17 - 18	Large reel	T-40	(1759 - 189C)
19 - 1B	Large reel	T-60	(1989 - 1B2F)

Note:

- **The values of cassette tape type <2> in the above table are typical values with representative cassette tapes.**

5.2.7 EMG detail information <3>

Three deck operation modes preceding the deck operation mode in which the EMG occurs may be confirmed based on the figures in the EMG information detail <3>. For the contents of the displayed information, see the table "Deck operation mode" in section "5.2.5 EMG detail information <1>".

JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY DIGITAL VIDEO STORAGE CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YD032)

Printed in Japan
VPT

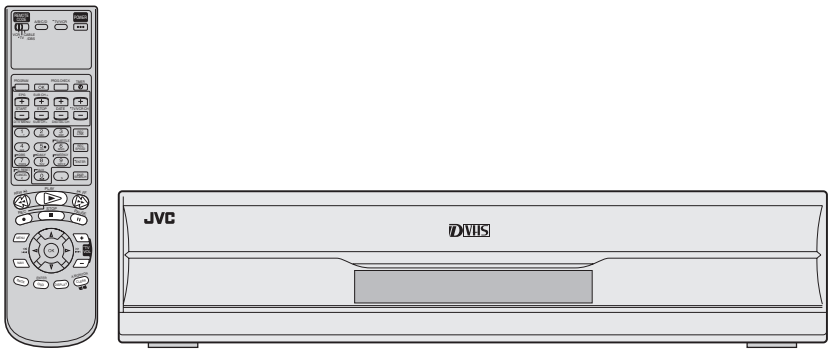
JVC

SCHEMATIC DIAGRAMS

D-VHS DIGITAL RECORDER

HM-DH5US,HM-DT100US

CD-ROM No.SML200411



HM-DH5US,HM-DT100US [D4D4, D4D7]

For disassembling and assembling of MECHANISM ASSEMBLY, refer to the SERVICE MANUAL No.86700(MECHANISM ASSEMBLY).

COPYRIGHT © 2004 Victor Company of Japan, Limited.

No.YD032SCH
2004/11

CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components indentified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ(1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in μF, (P: PF).
3) All inductance values are in μH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

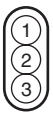
2. Indications of control voltage

AUX : Active at high.

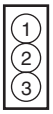
$\overline{\text{AUX}}$ or AUX(L) : Active at low.

3. Interpreting Connector indications

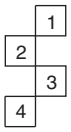
Removable connector



Wire soldered directly on board



Non-removable Board connector



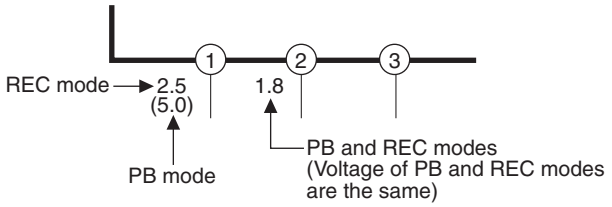
Board to Board

Connected pattern on board
The arrows indicate signal path

Note: For the destination of each signal and further line connections that are cut off from the diagram, refer to "BOARD INTERCONNECTIONS"

4. Voltage measurement

1) Regulator (DC/DC CONV) circuits
   REC : Colour bar signal.
   PB : Alignment tape (Colour bar).
   — : Unmeasurable or unnecessary to measure.
2) Indication on schematic diagram
   Voltage indications for REC and PB mode on the schematic diagram are as shown below.

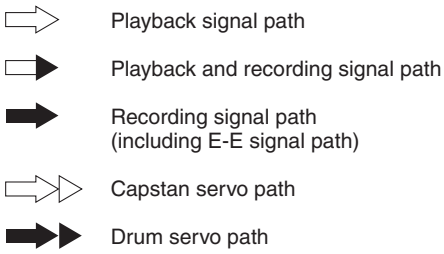


Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

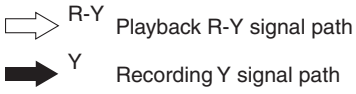
5. Signal path Symbols

The arrows indicate the signal path as follows.

NOTE : The arrow is DVC unique object.

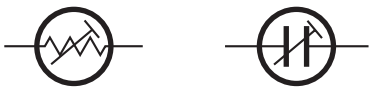


(Example)



6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.

CIRCUIT BOARD NOTES

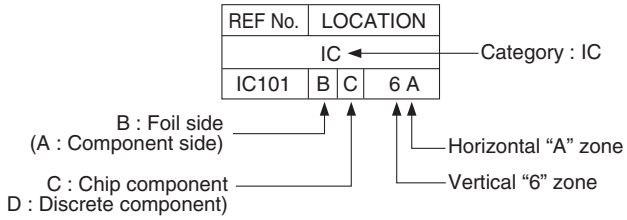
1. Foil and Component sides

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

rts location are indicated by guide scale on the circuit board.

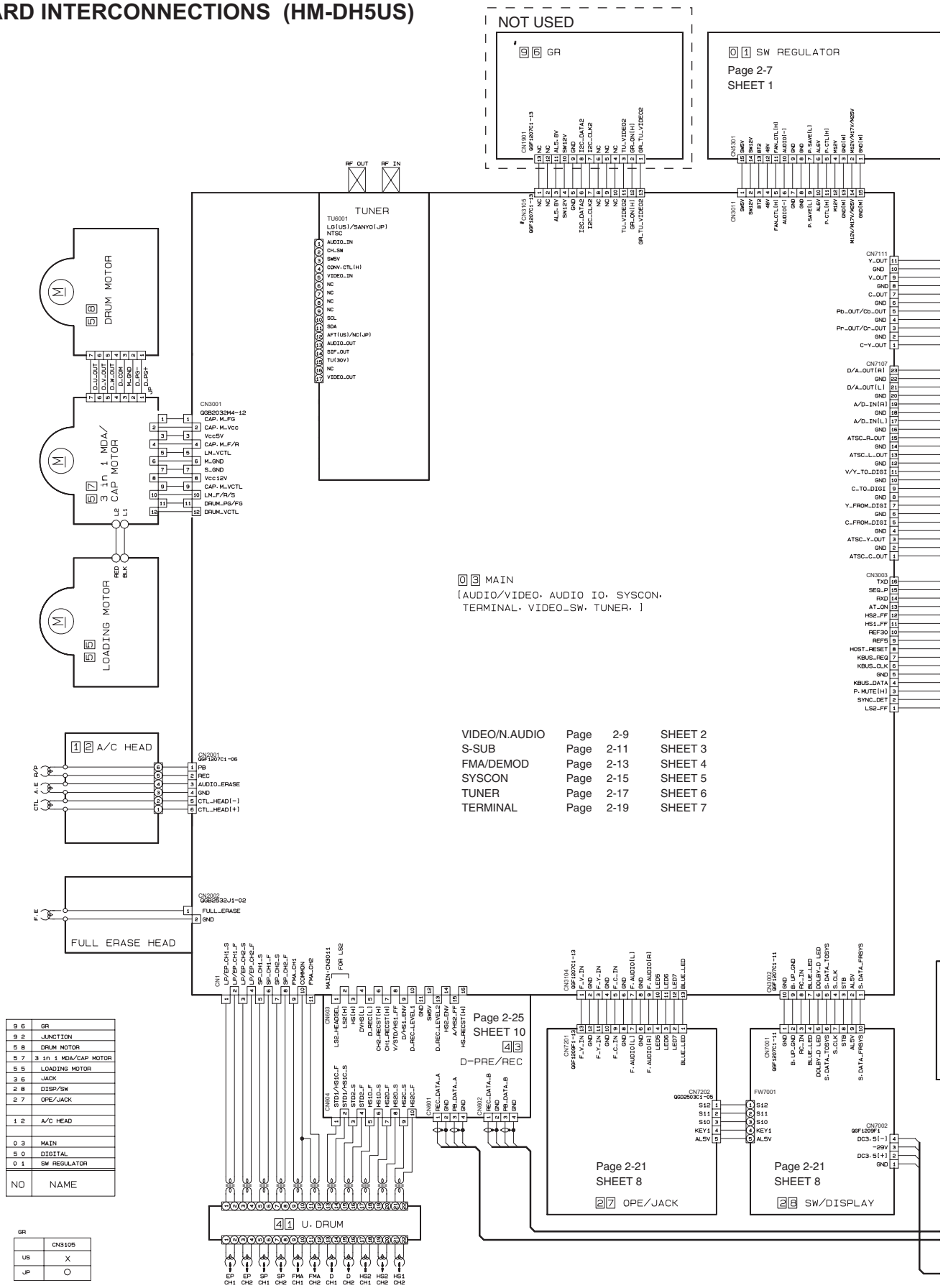
2. Parts location guides

Parts location are indicated by guide scale on the circuit board.



Note: For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

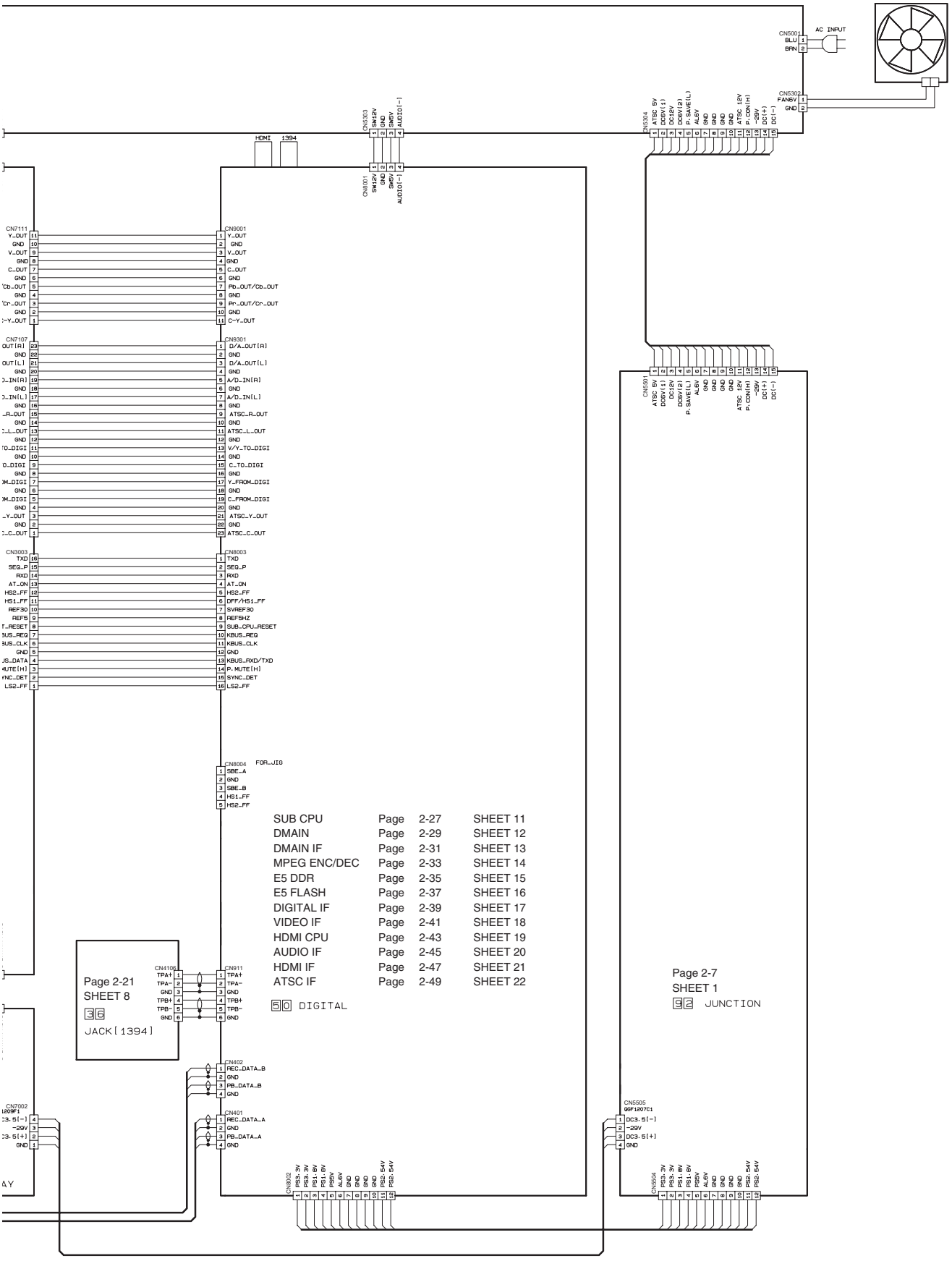
■ BOARD INTERCONNECTIONS (HM-DH5US)



96	GR
92	JUNCTION
58	DRUM MOTOR
57	3 in 1 MDA/CAP MOTOR
55	LOADING MOTOR
36	JACK
28	DISP/SW
27	OPE/JACK
12	A/C HEAD
03	MAIN
50	DIGITAL
01	SW REGULATOR
NO	NAME

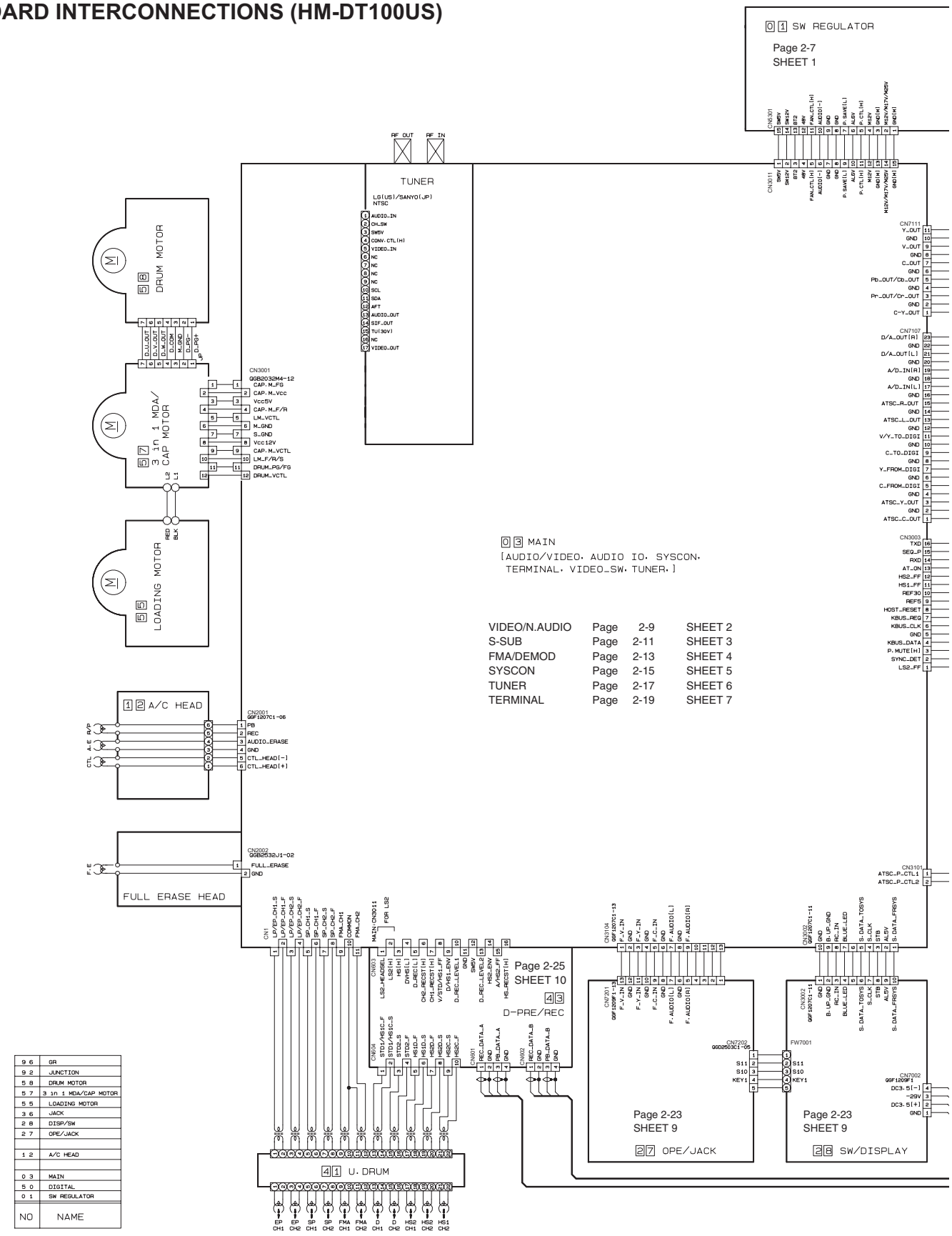
GR

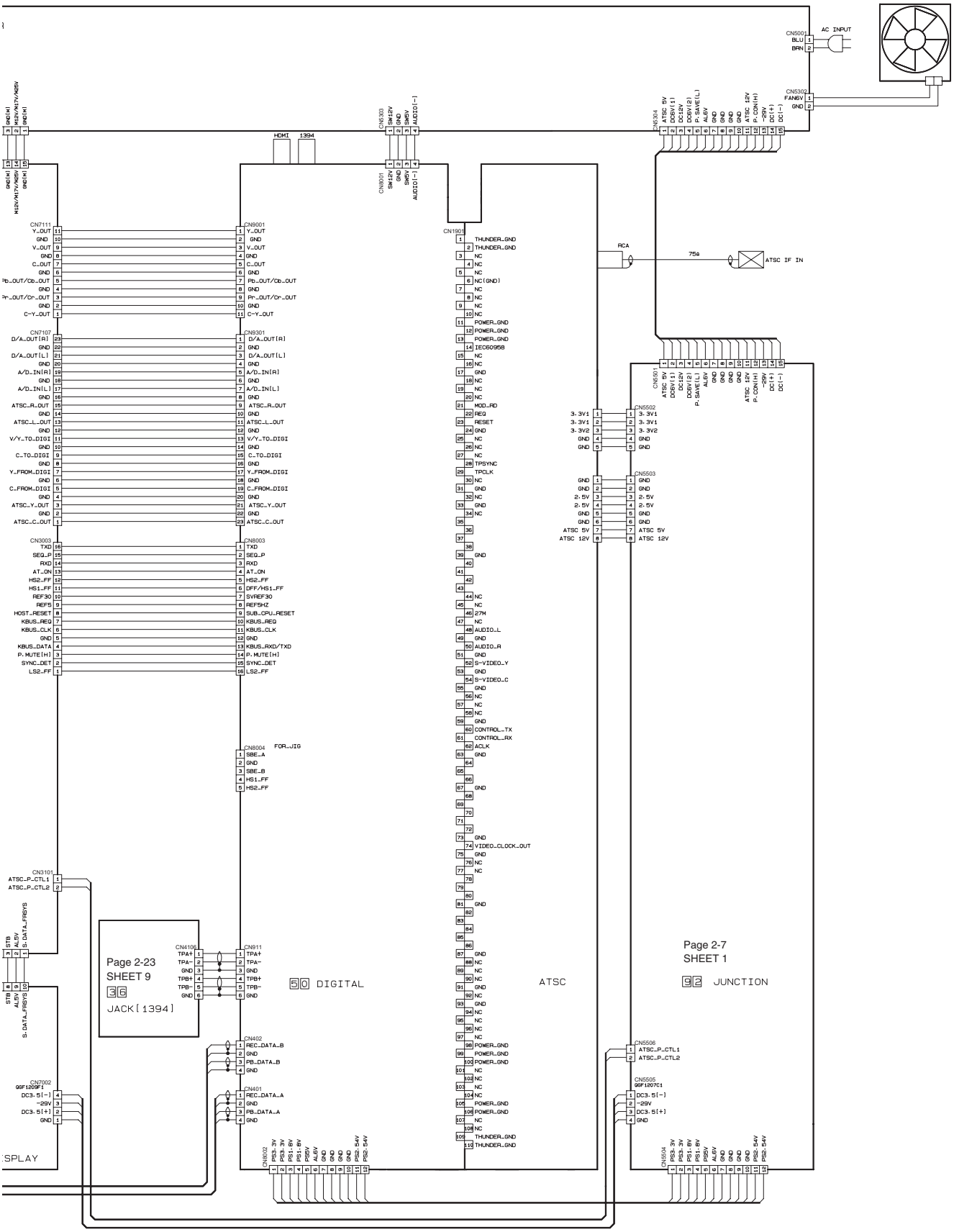
	CN3105
US	X
JP	O



p10634001a_rev0

■ BOARD INTERCONNECTIONS (HM-DT100US)

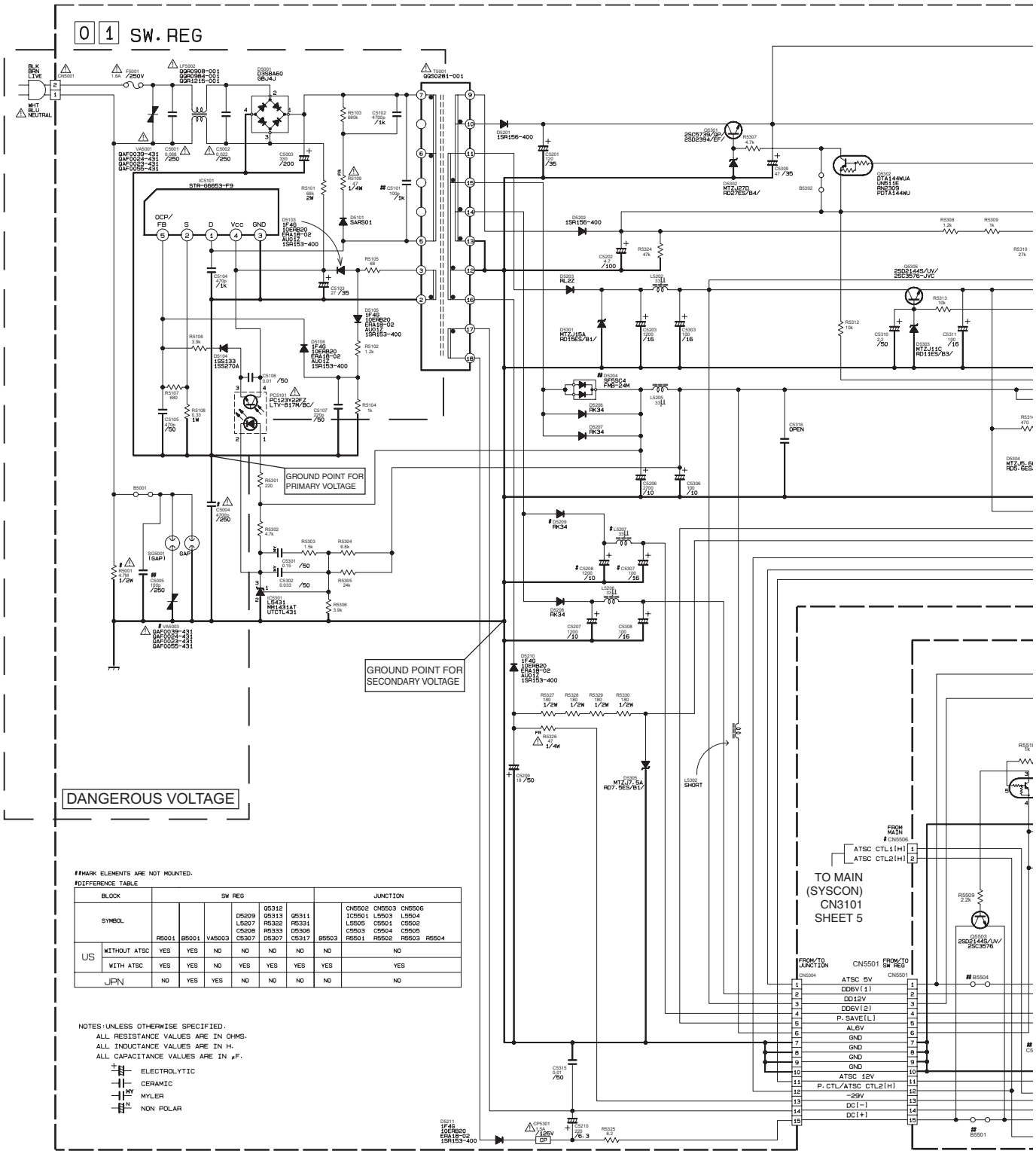




SUB CPU	Page	2-27	SHEET 11	DIGITAL IF	Page	2-39	SHEET 17
DMAIN	Page	2-29	SHEET 12	VIDEO IF	Page	2-41	SHEET 18
DMAIN IF	Page	2-31	SHEET 13	HDMI CPU	Page	2-43	SHEET 19
MPEG ENC/DEC	Page	2-33	SHEET 14	AUDIO IF	Page	2-45	SHEET 20
E5 DDR	Page	2-35	SHEET 15	HDMI IF	Page	2-47	SHEET 21
E5 FLASH	Page	2-37	SHEET 16	ATSC IF	Page	2-49	SHEET 22

p10656001a_rev0

SWITCHING REGULATOR AND JUNCTION SCHEMATIC DIAGRAMS

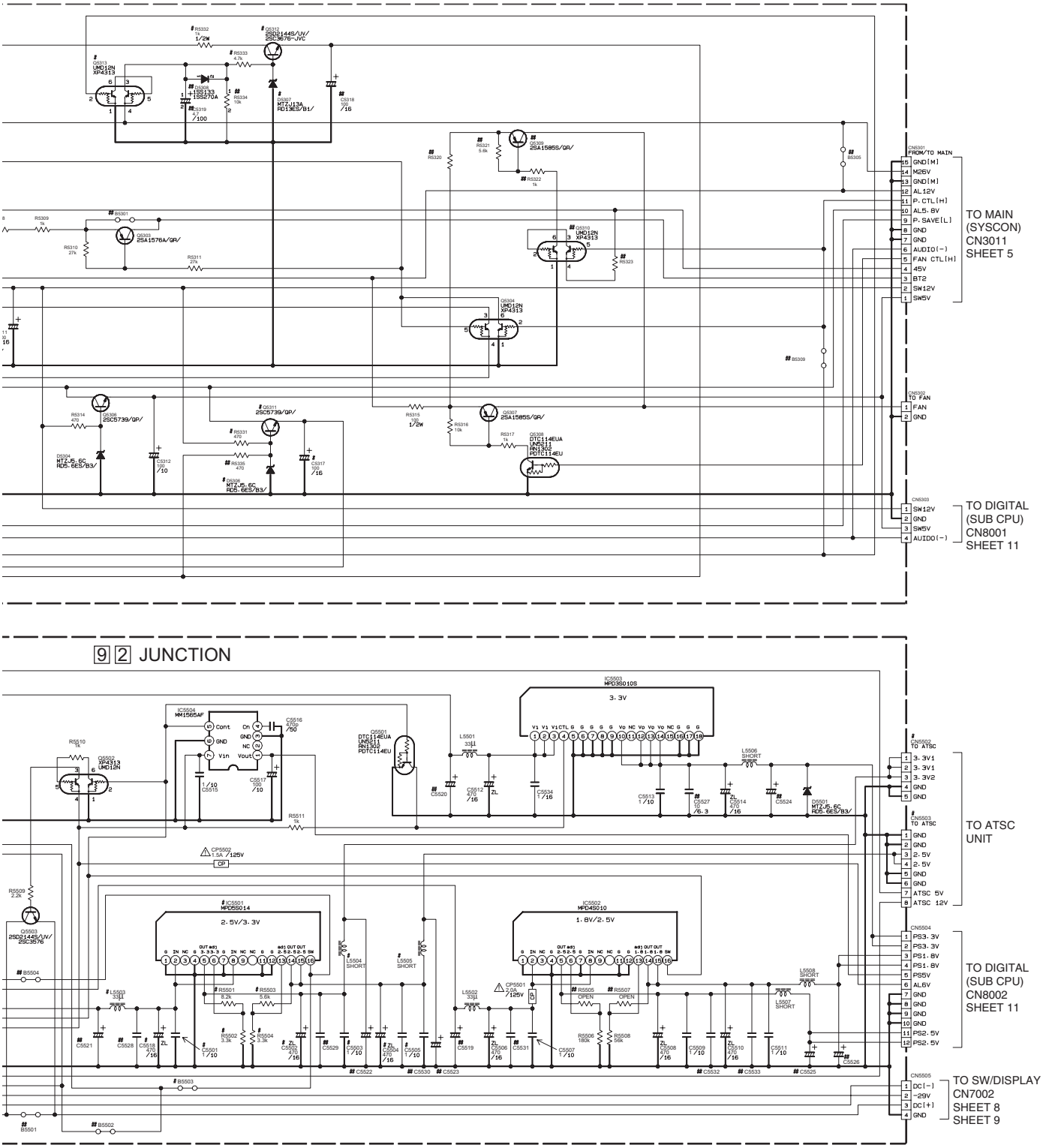


##MARK ELEMENTS ARE NOT MOUNTED.
#DIFFERENCE TABLE

BLOCK		SW REG							JUNCTION		
SYMBOL		R5001	B5001	VA5003	D5209 L5207 C5208 C5307	Q5312 Q5313 R5322 R5333 D5307	Q5311 R5331 D5306 C5317	B5503	CN5502 IC5501 L5505 C5503 R5501	CN5503 L5503 C5501 C5504 R5502	CN5506 L5504 C5502 C5505 R5503 R5504
US	WITHOUT ATSC	YES	YES	NO	NO	NO	NO	NO	NO		
	WITH ATSC	YES	YES	NO	YES	YES	YES	YES	YES		
JPN		NO	YES	YES	NO	NO	NO	NO	NO		

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

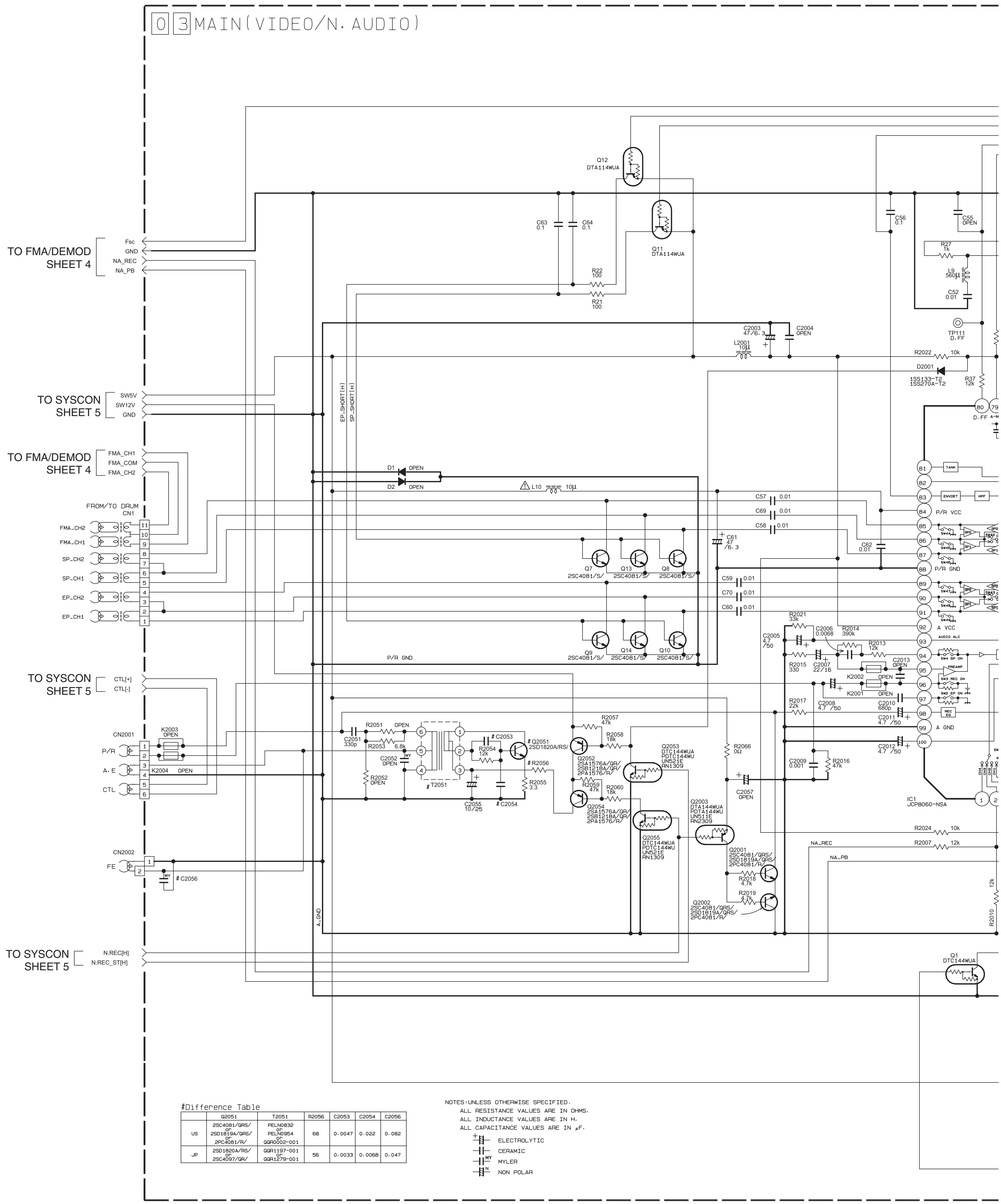
ELECTROLYTIC
CERAMIC
MY MYLER
NON POLAR


TO MAIN (SYSCON) CN3011 SHEET 5
TO DIGITAL (SUB CPU) CN8001 SHEET 11
9 2 JUNCTION
TO ATSC UNIT
TO DIGITAL (SUB CPU) CN8002 SHEET 11
TO SW/DISPLAY CN7002 SHEET 8 SHEET 9

p10664001a_rev0

SHEET 1

■ MAIN(VIDEO/N.AUDIO) SCHEMATIC DIAGRAM



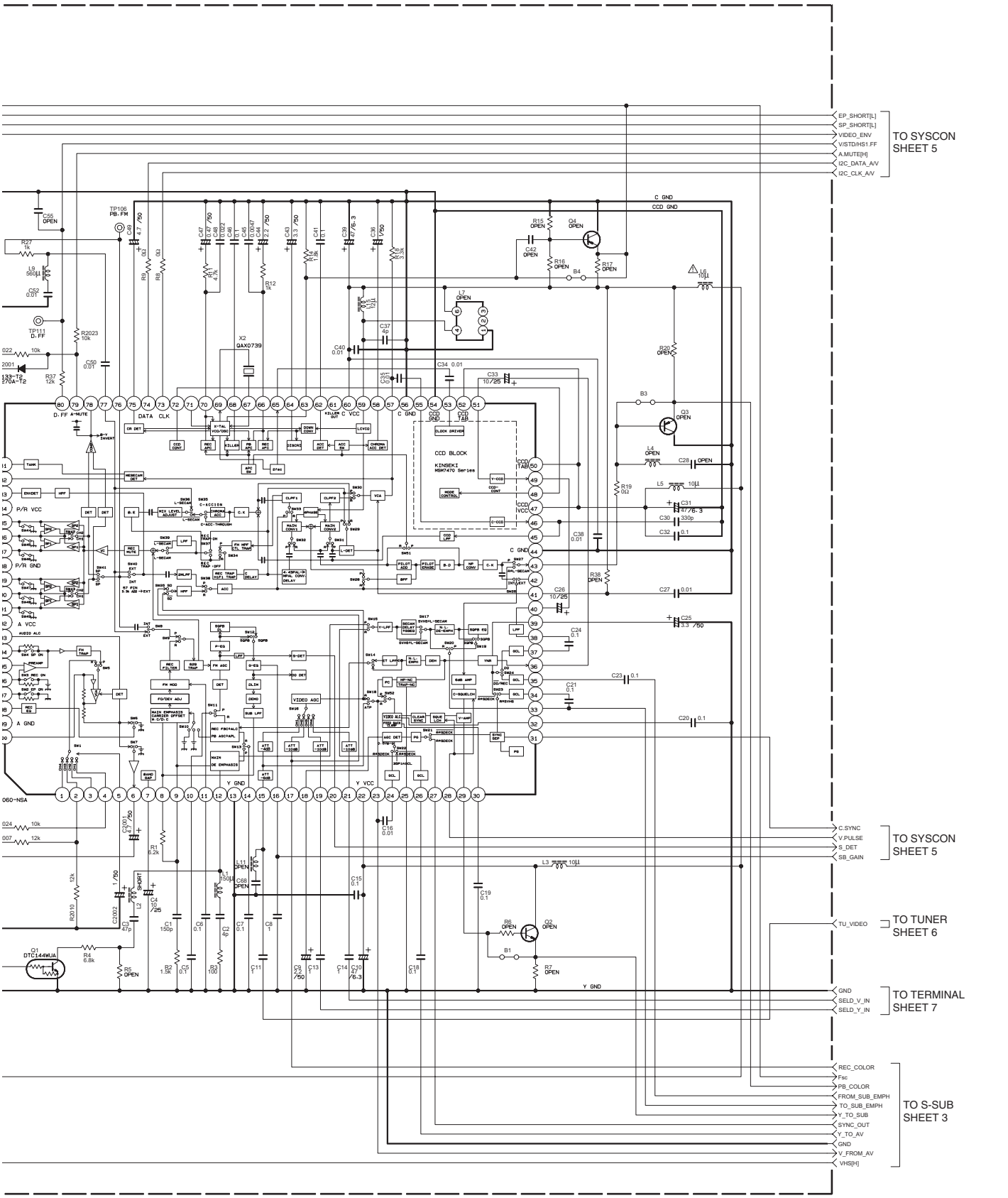
03 MAIN(VIDEO/N.AUDIO)
TO FMA/DEMOD SHEET 4
Fsc
GND
NA_REC
NA_PB
TO SYSCON SHEET 5
SW5V
SW12V
GND
TO FMA/DEMOD SHEET 4
FMA_CH1
FMA_COM
FMA_CH2
FROM/TO DRUM CN1
FMA_CH2
FMA_CH1
SP_CH2
SP_CH1
EP_CH2
EP_CH1
TO SYSCON SHEET 5
CTL[+]
CTL[-]
CN2001
P/R
A.E
CTL
K2003 OPEN
K2004 OPEN
CN2002
FE
C2056
TO SYSCON SHEET 5
N.REC[H]
N.REC_ST[H]
EP_SHORT[H]
SP_SHORT[H]
A_GND
P/R GND
Q12 DTA114WUA
Q11 DTA114WUA
C63 0.1
C64 0.1
R22 100
R21 100
C2003 47/6.3
C2004 OPEN
L2001 10μ
D1 OPEN
D2 OPEN
L10 10μ
C61 47 /6.3
Q7 2SC4081/S/
Q13 2SC4081/S/
Q8 2SC4081/S/
Q9 2SC4081/S/
Q14 2SC4081/S/
Q10 2SC4081/S/
C57 0.01
C69 0.01
C58 0.01
C62 0.01
C59 0.01
C70 0.01
C60 0.01
C56 0.1
C55 OPEN
R27 1k
L9 560μ
C52 0.01
TP111 D.FF
R2022 10k
D2001 1SS133-T2 1SS270A-T2
R37 12k
D.FF
TANK
ENVDET
HPF
P/R VCC
P/R GND
A VCC
AUDIO ALC
SW4 SP ON
PREAMP
SW3 REC ON
SW2 EP ON
REC EQ
A GND
IC1 JCP8060-NSA
R2021 33k
C2005 4.7 /50
C2006 0.0068
R2014 390k
R2013 12k
R2015 330
C2007 22/16
C2013 OPEN
K2002 OPEN
K2001 OPEN
R2017 22k
C2008 4.7 /50
C2010 680p
C2011 4.7 /50
C2012 4.7 /50
C2009 0.001
R2016 47k
R2066 0Ω
C2057 OPEN
C2051 330p
R2051 OPEN
R2053 6.8k
C2052 OPEN
R2052 OPEN
T2051
C2053
R2054 12k
Q2051 2SD1820A/RS/
R2056
R2055 3.3
C2055 10/25
C2054
R2057 47k
R2058 18k
Q2052 2SA1576A/QR/ 2SB1218A/QR/ 2PA1576/R/
R2059 47k
R2060 18k
Q2054 2SA1576A/QR/ 2SB1218A/QR/ 2PA1576/R/
Q2053 DTC144WUA PDTC144WU UN521E RN1309
Q2055 DTC144WUA PDTC144WU UN521E RN1309
Q2003 DTA144WUA PDTA144WU UN511E RN2309
Q2001 2SC4081/QRS/ 2SD1819A/QRS/ 2PC4081/R/
R2018 4.7k
R2019 4.7k
Q2002 2SC4081/QRS/ 2SD1819A/QRS/ 2PC4081/R/
R2024 10k
R2007 12k
NA_REC
NA_PB
R2010 12k
Q1 DTC144WUA

#Difference Table

	Q2051	T2051	R2056	C2053	C2054	C2056
US	2SC4081/QRS/ or 2SD1819A/QRS/ or 2PC4081/R/	PELN0832 or PELN0954 or QQR0002-001	68	0.0047	0.022	0.082
JP	2SD1820A/RS/ or 2SC4097/QR/	QQR1197-001 or QQR1279-001	56	0.0033	0.0068	0.047

NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

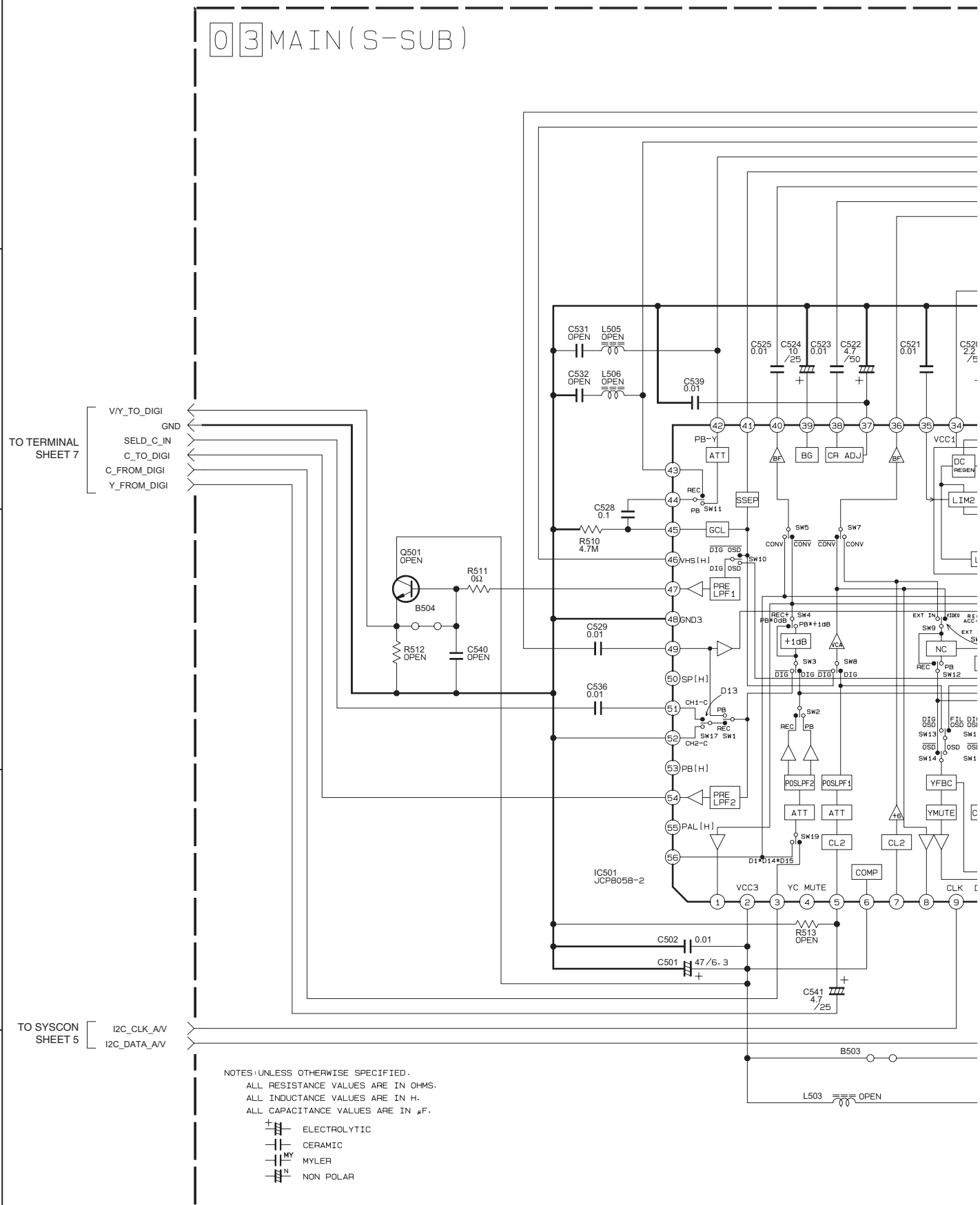
- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

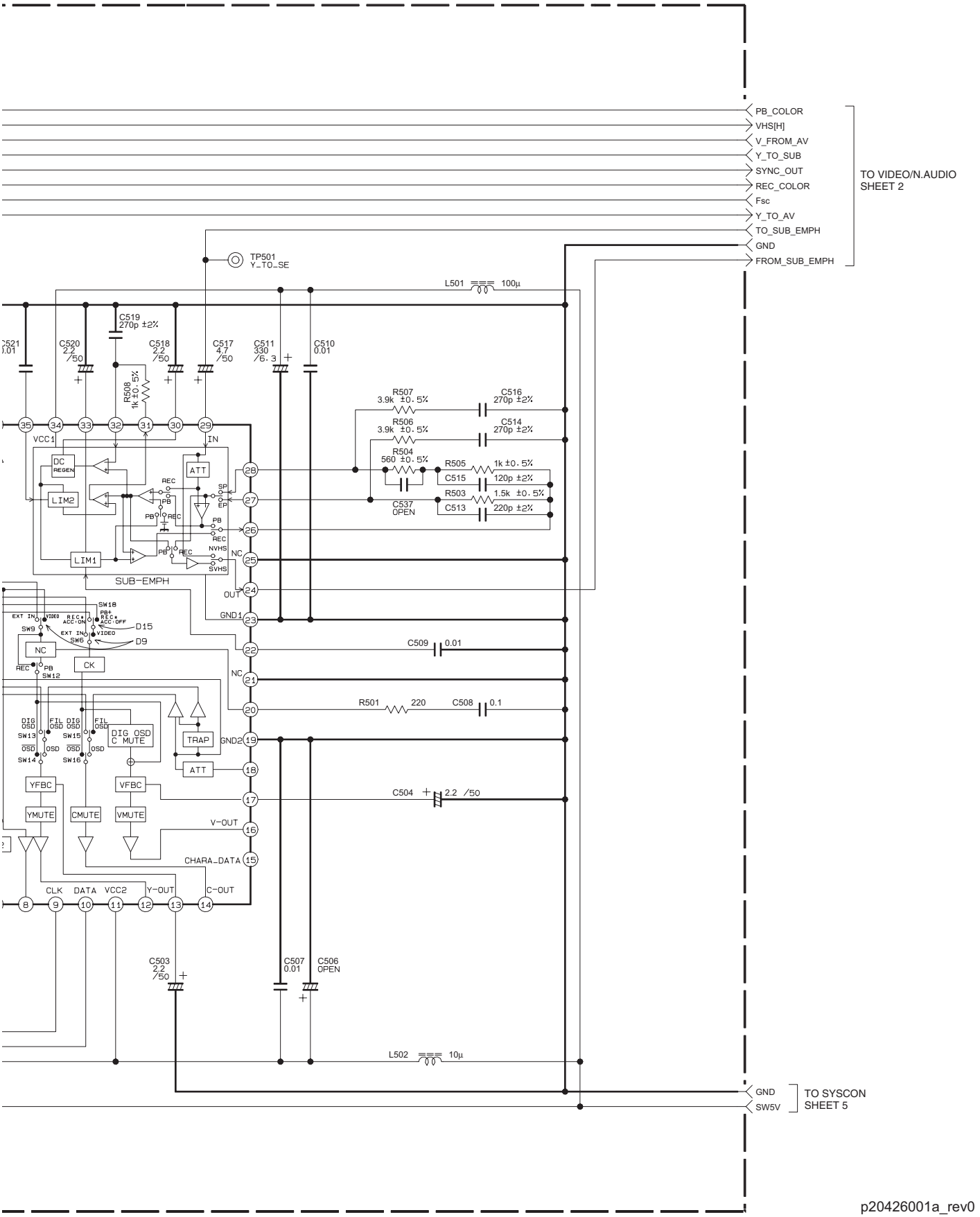


p10636001a_rev0

SHEET 2

■ MAIN(S-SUB) SCHEMATIC DIAGRAM

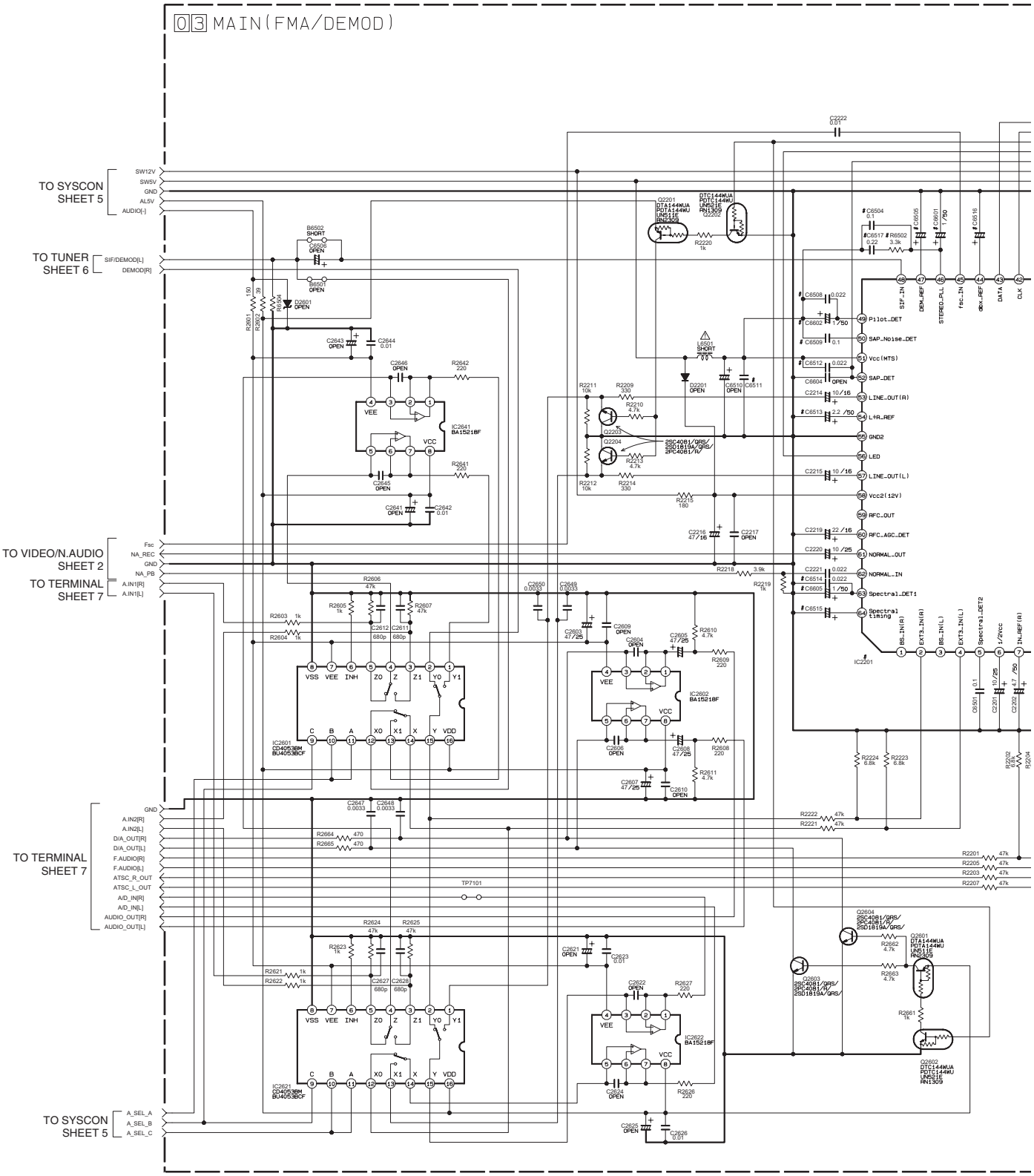


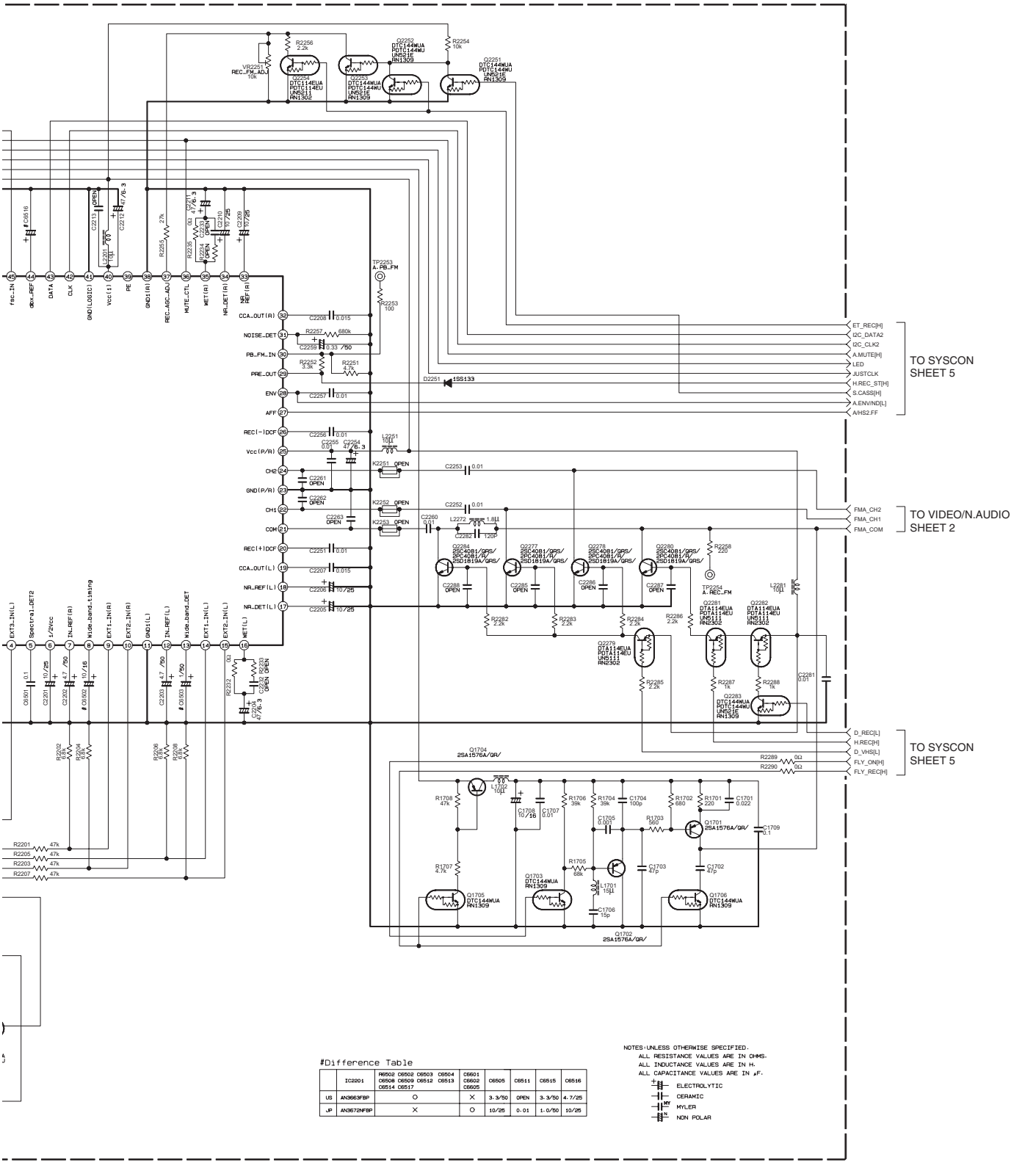


p20426001a_rev0

SHEET 3

■ MAIN(FMA/DEMOD) SCHEMATIC DIAGRAM



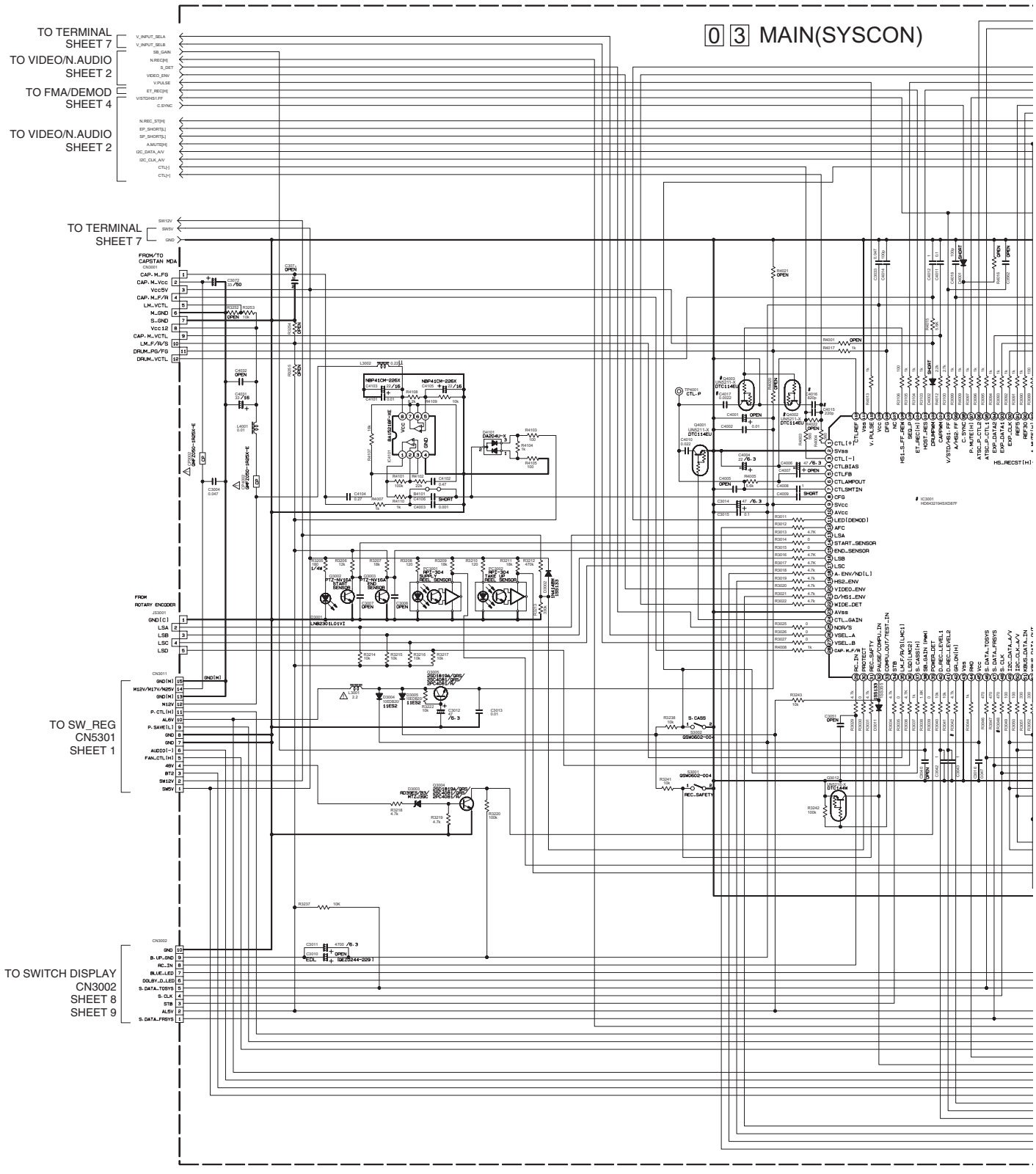


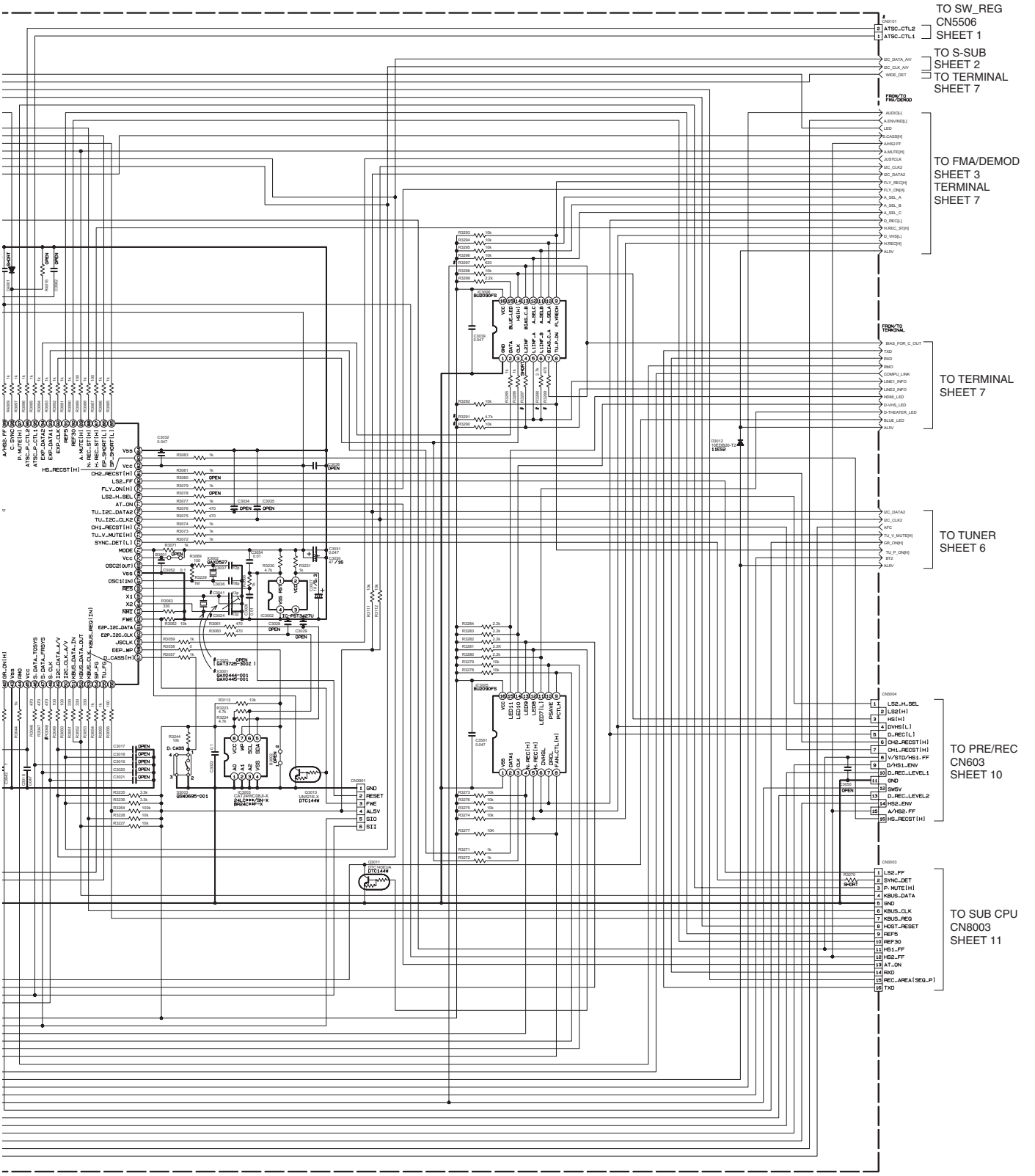
	IC2201	R6502 R6503 R6504 R6508 R6509 R6512 R6513 R6514 R6517	C6501 C6502 C6505	C6505	C6511	C6515	C6516
US	AN3663FBP	O	×	3.3/50	OPEN	3.3/50	4.7/25
JP	AN3672NFBP	×	O	10/25	0.01	1.0/50	10/25

p10635001a_rev0

SHEET 4

■ MAIN(SYSCON) SCHEMATIC DIAGRAM





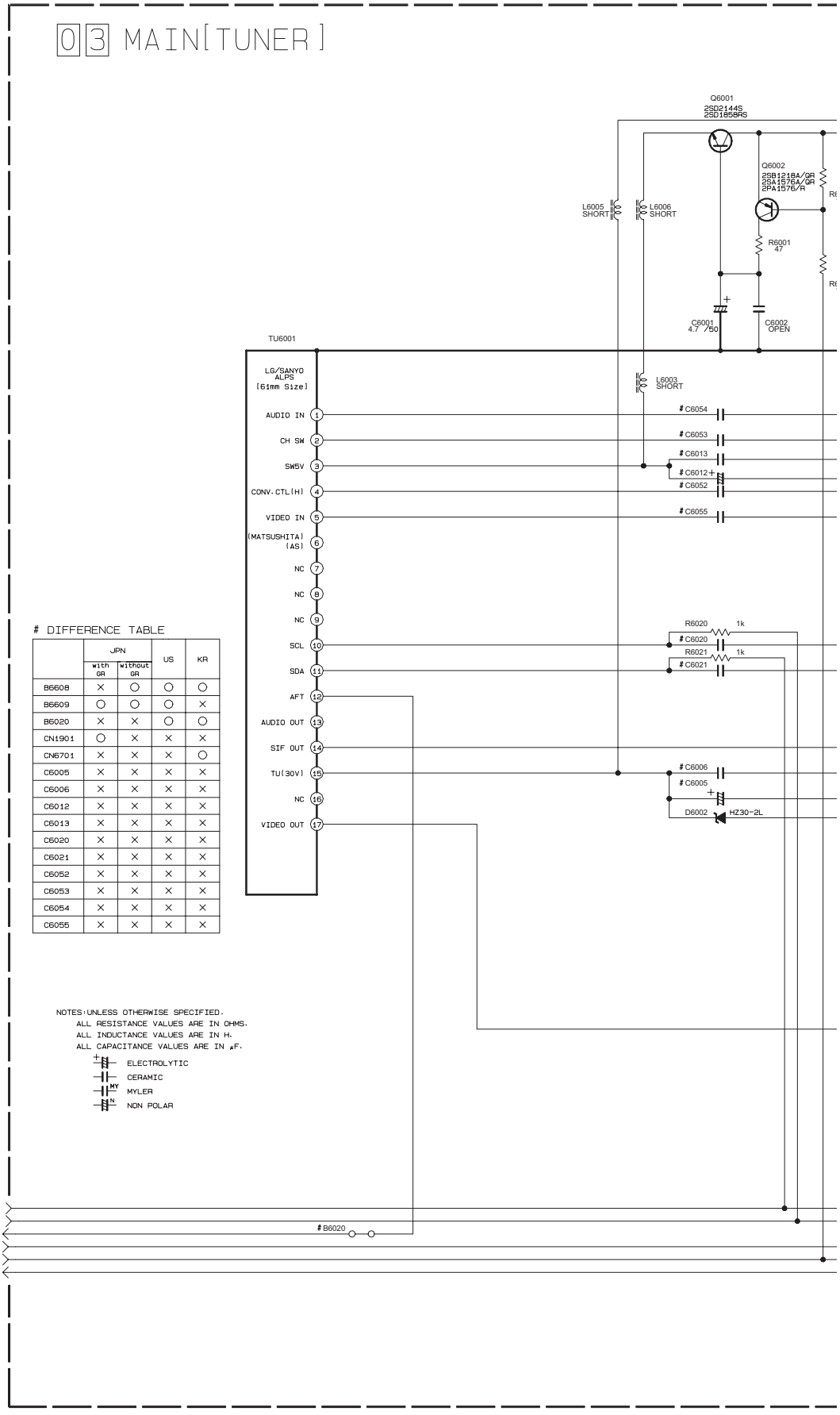
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

p10633001a_rev0

SHEET 5

■ MAIN(TUNER) SCHEMATIC DIAGRAM

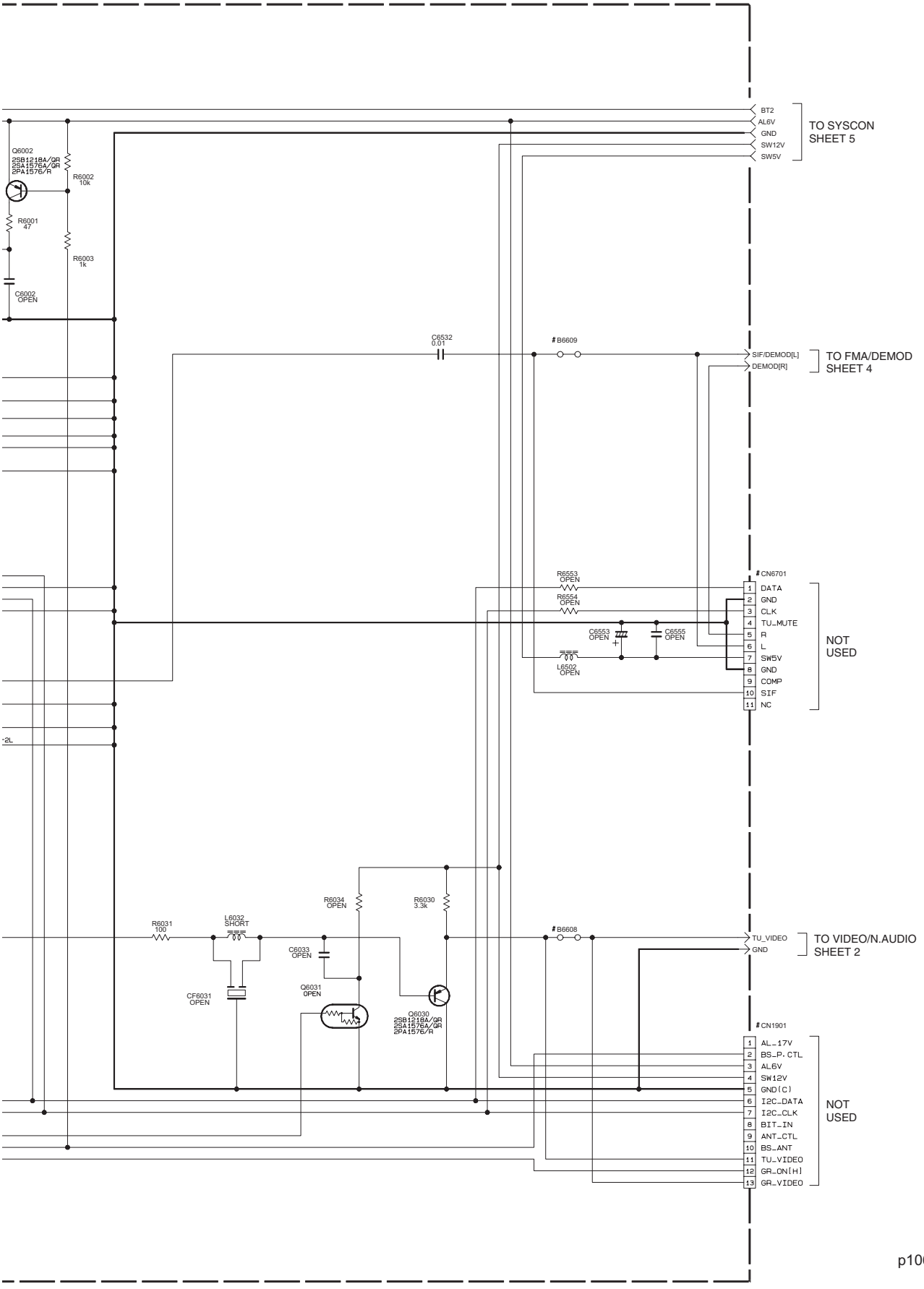


DIFFERENCE TABLE

	JPN		US	KR
	with GR	without GR		
B6608	×	○	○	○
B6609	○	○	○	×
B6020	×	×	○	○
CN1901	○	×	×	×
CN6701	×	×	×	○
C6005	×	×	×	×
C6006	×	×	×	×
C6012	×	×	×	×
C6013	×	×	×	×
C6020	×	×	×	×
C6021	×	×	×	×
C6052	×	×	×	×
C6053	×	×	×	×
C6054	×	×	×	×
C6055	×	×	×	×

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

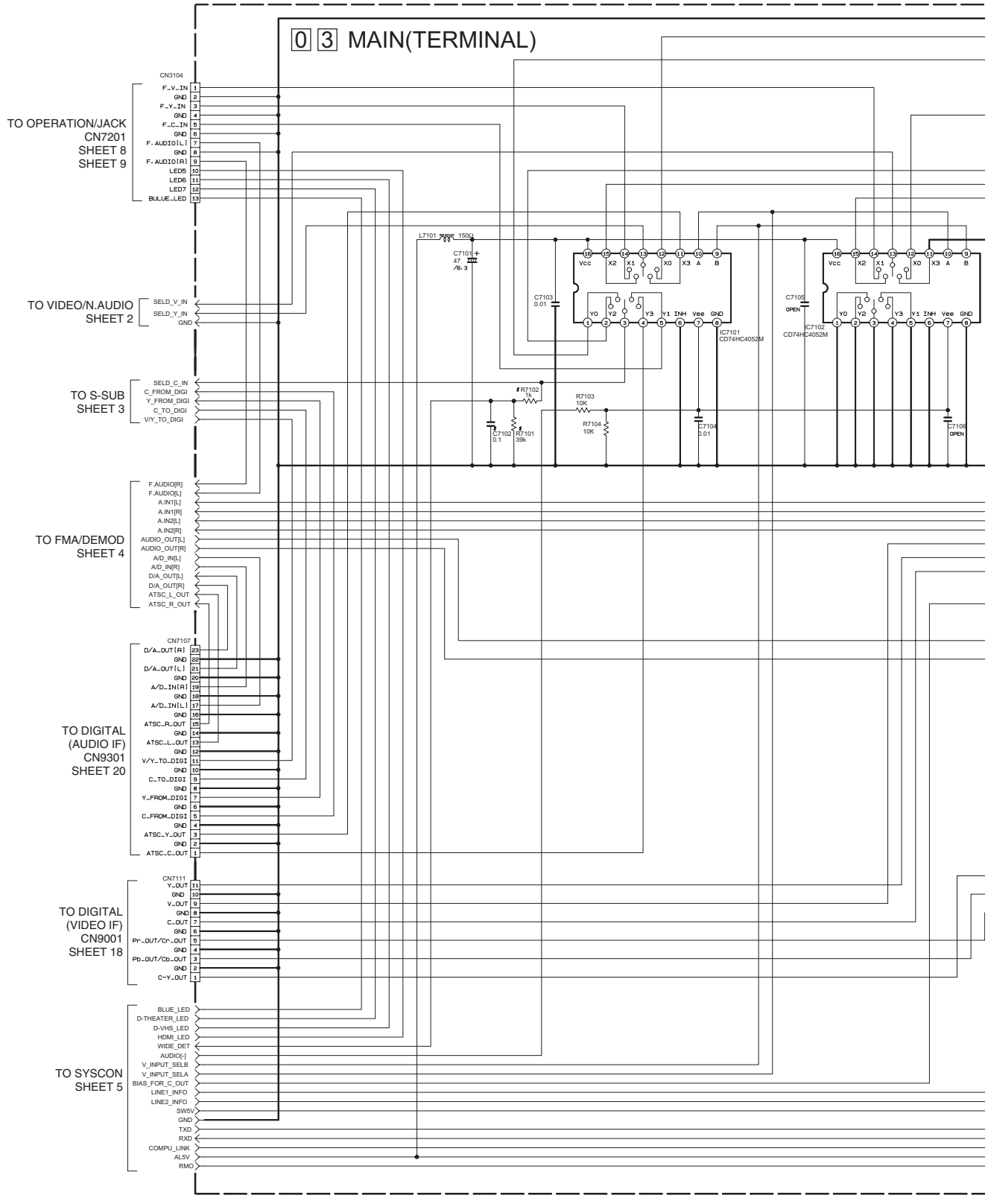
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR



p10632001a_rev0

SHEET 6

■ MAIN(TERMINAL) SCHEMATIC DIAGRAM

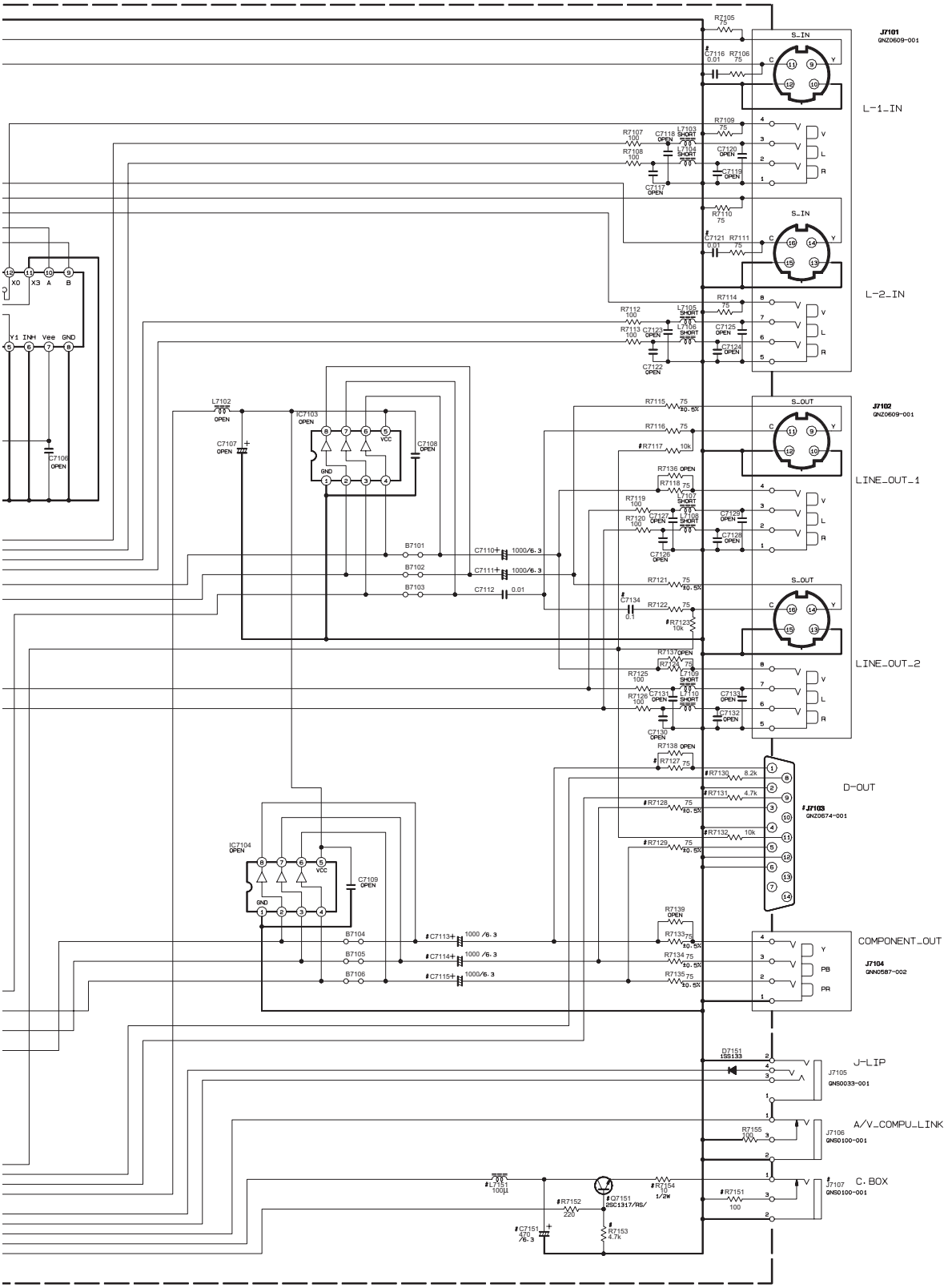


* DIFFERENCE TABLE

	R7101 R7102 C7102 R7117 R7123 J7103 R7127-R7132	C7116 C7121	C7134	C7113 C7114 C7115	J7107 L7151 C7151 Q7151 R7151-R7154
US MODEL	×	0a	0a	470/6.3	○
JPN MODEL	○	0.01	0.1	1000/6.3	×

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

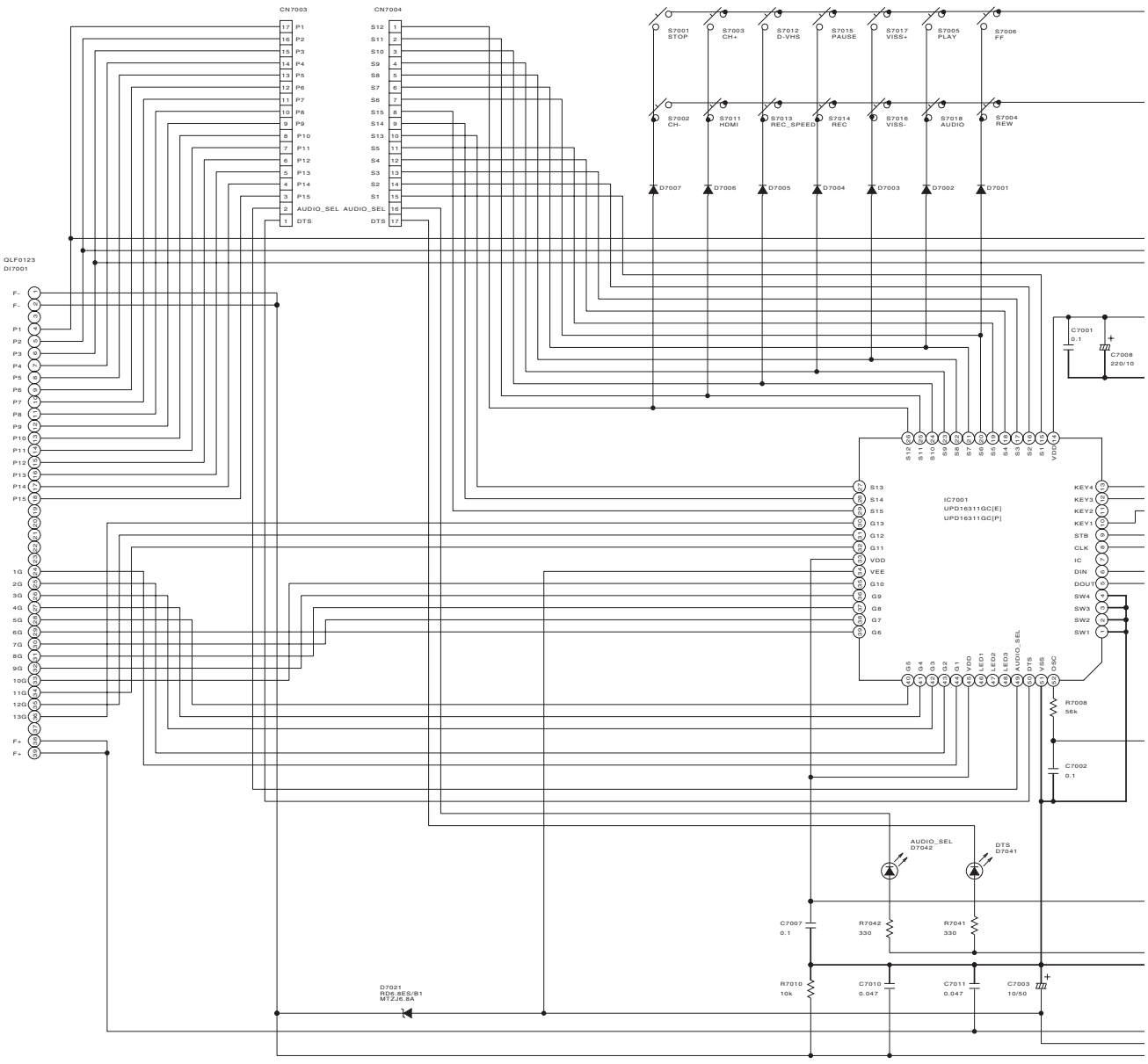
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR



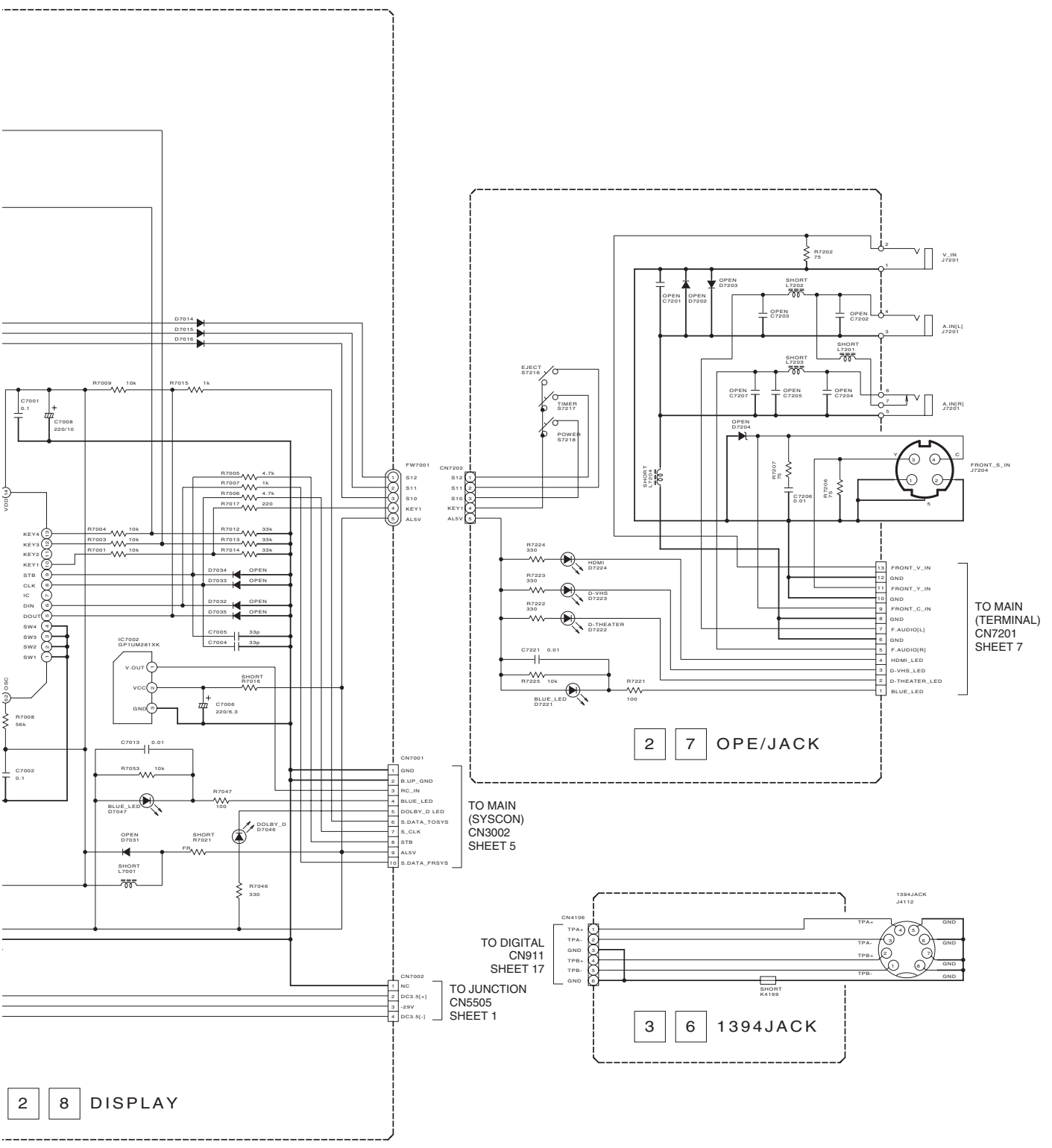
p10638001a_rev0

SHEET 7

■ OPERATION/JACK, SWITCH/DISPLAY AND JACK SCHEMATIC DIAGRAMS (HM-DH5US)

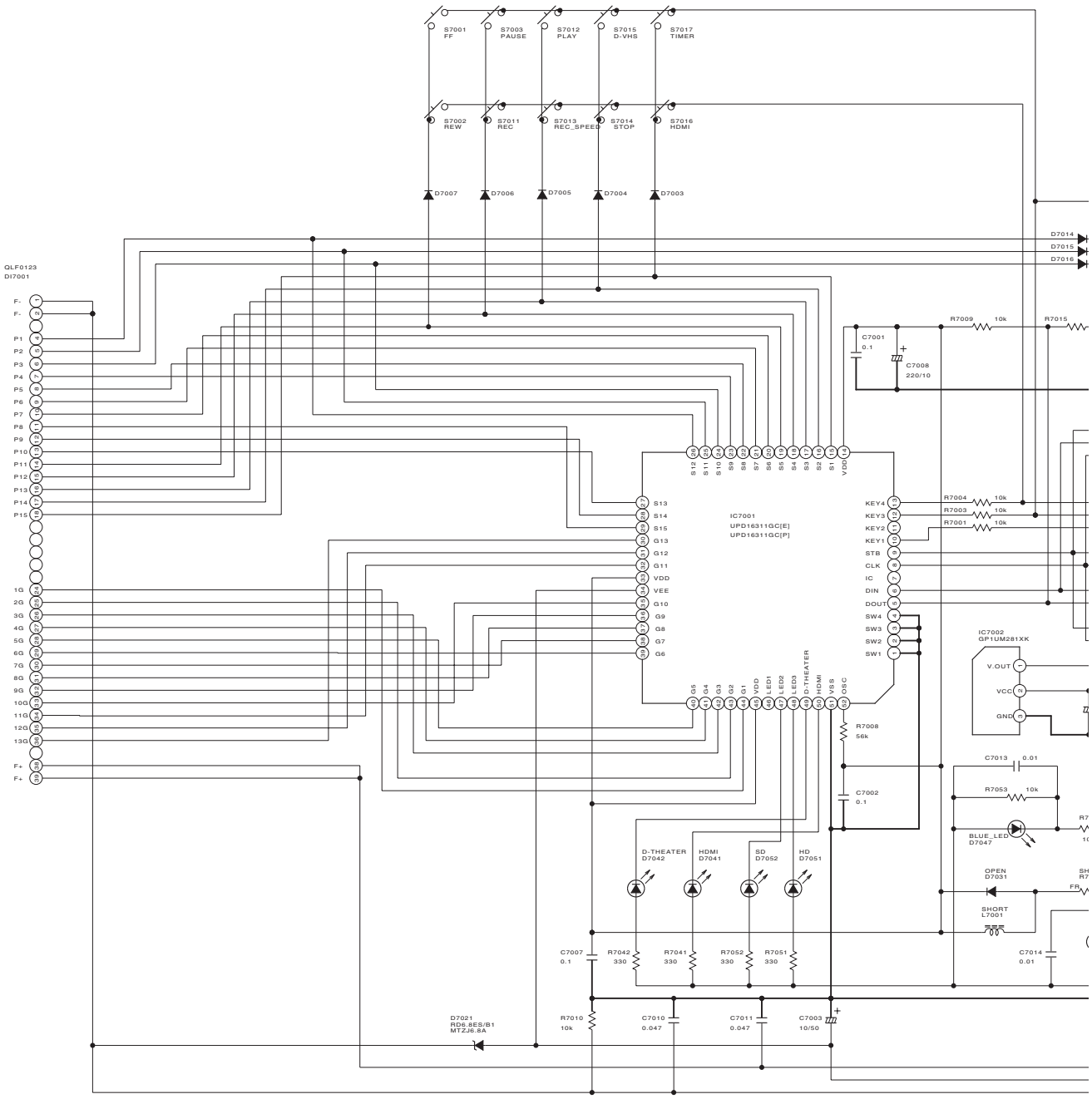


)

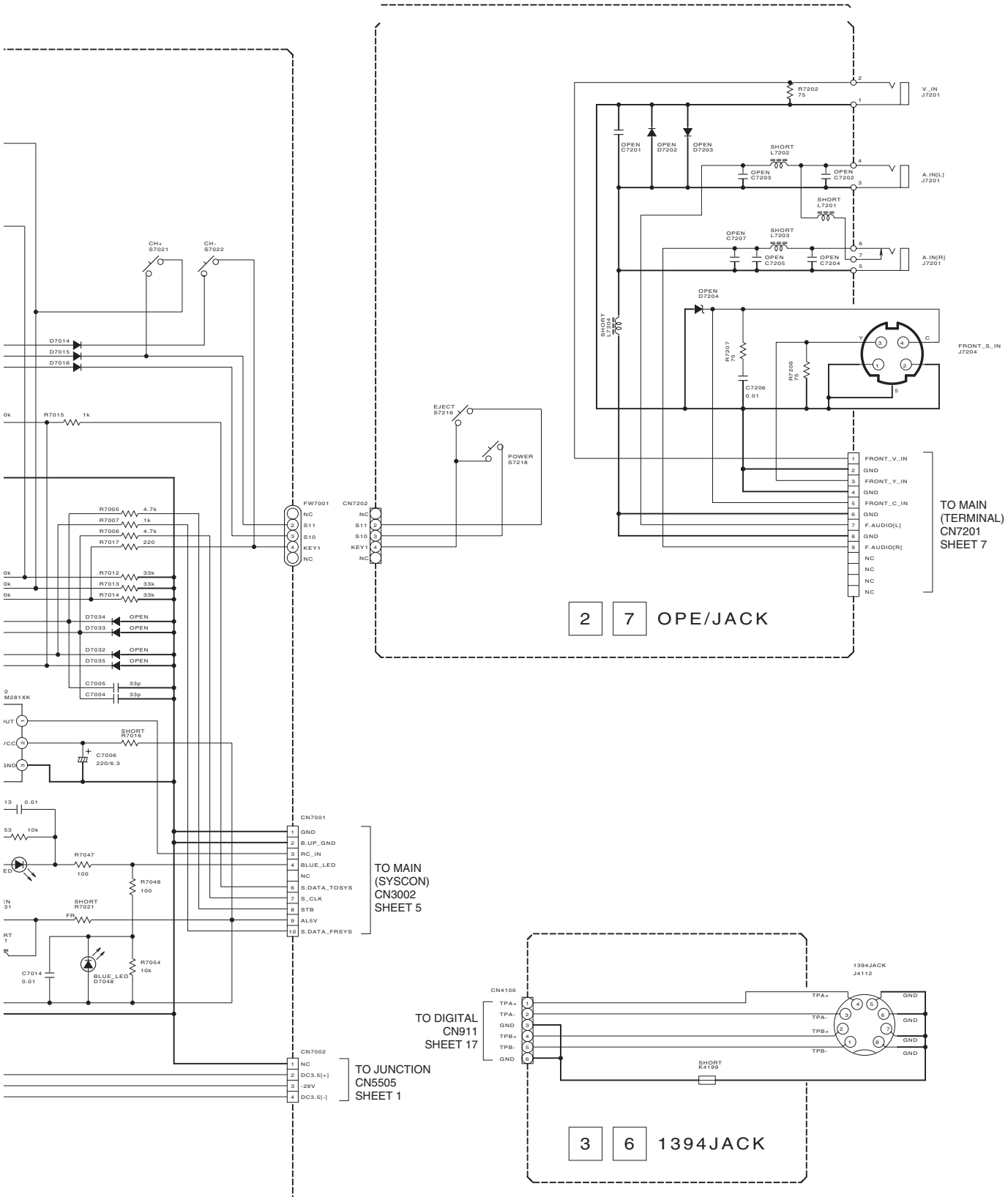


p10631001a_rev0

SHEET 8


S7001 FF
S7003 PAUSE
S7012 PLAY
S7015 D-VHS
S7017 TIMER
S7002 REW
S7011 REC
S7013 REC_SPEED
S7014 STOP
S7016 HDMI
D7007
D7006
D7005
D7004
D7003
D7014
D7015
D7016
QLF0123
DI7001
IC7001
UPD16311GC[E]
UPD16311GC[P]
IC7002
GP1UM281XK
V.OUT
VCC
GND
R7009 10k
R7015
C7001 0.1
C7008 220/10
R7004 10k
R7003 10k
R7001 10k
R7008 56k
C7002 0.1
C7013 0.01
R7053 10k
BLUE_LED D7047
D-THEATER D7042
HDMI D7041
SD D7052
HD D7051
OPEN D7031
SHORT L7001
C7007 0.1
R7042 330
R7041 330
R7052 330
R7051 330
C7014 0.01
D7021 RD6.8ES/B1 MTZJ6.8A
R7010 10k
C7010 0.047
C7011 0.047
C7003 10/50

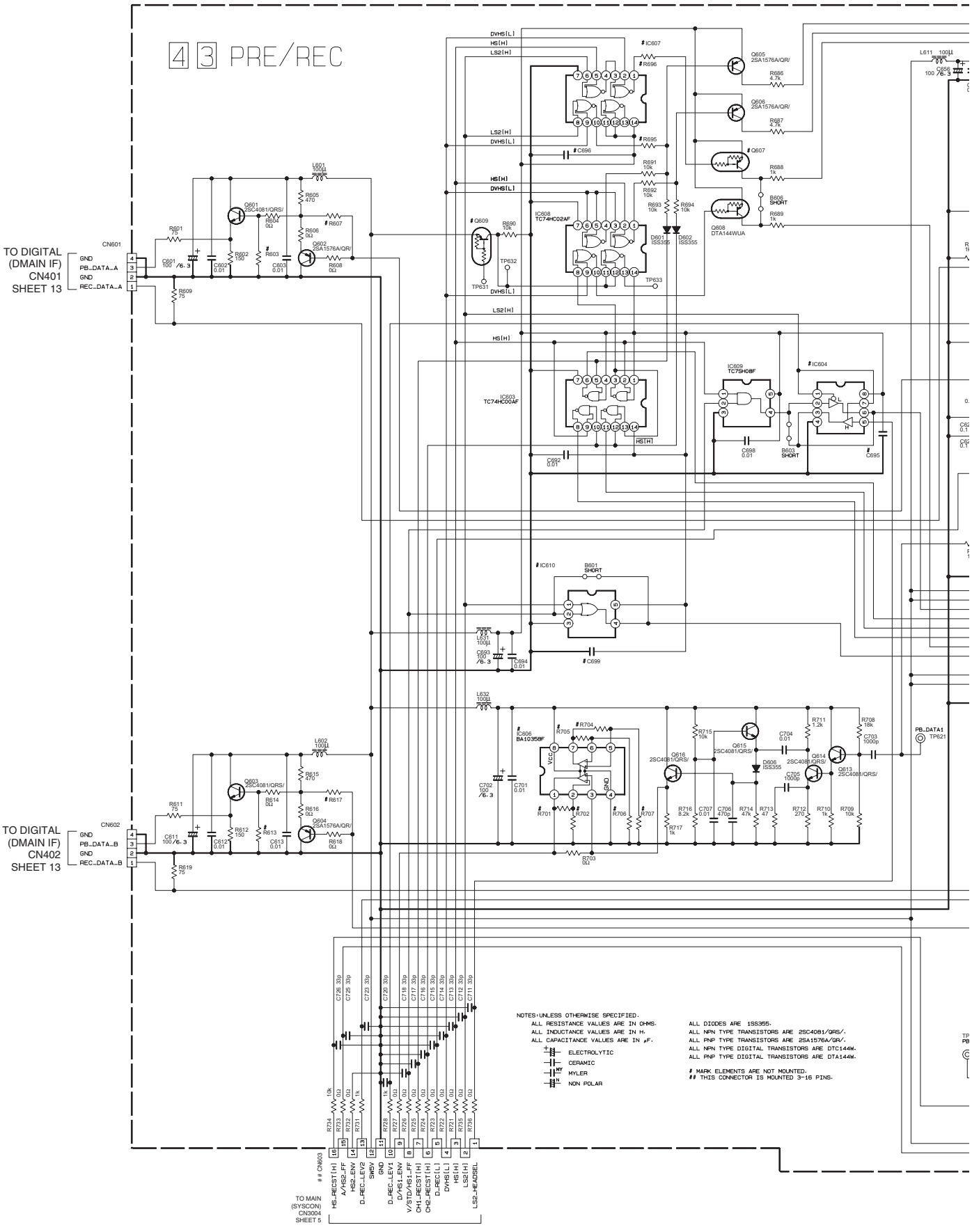
2 8 DISPLAY

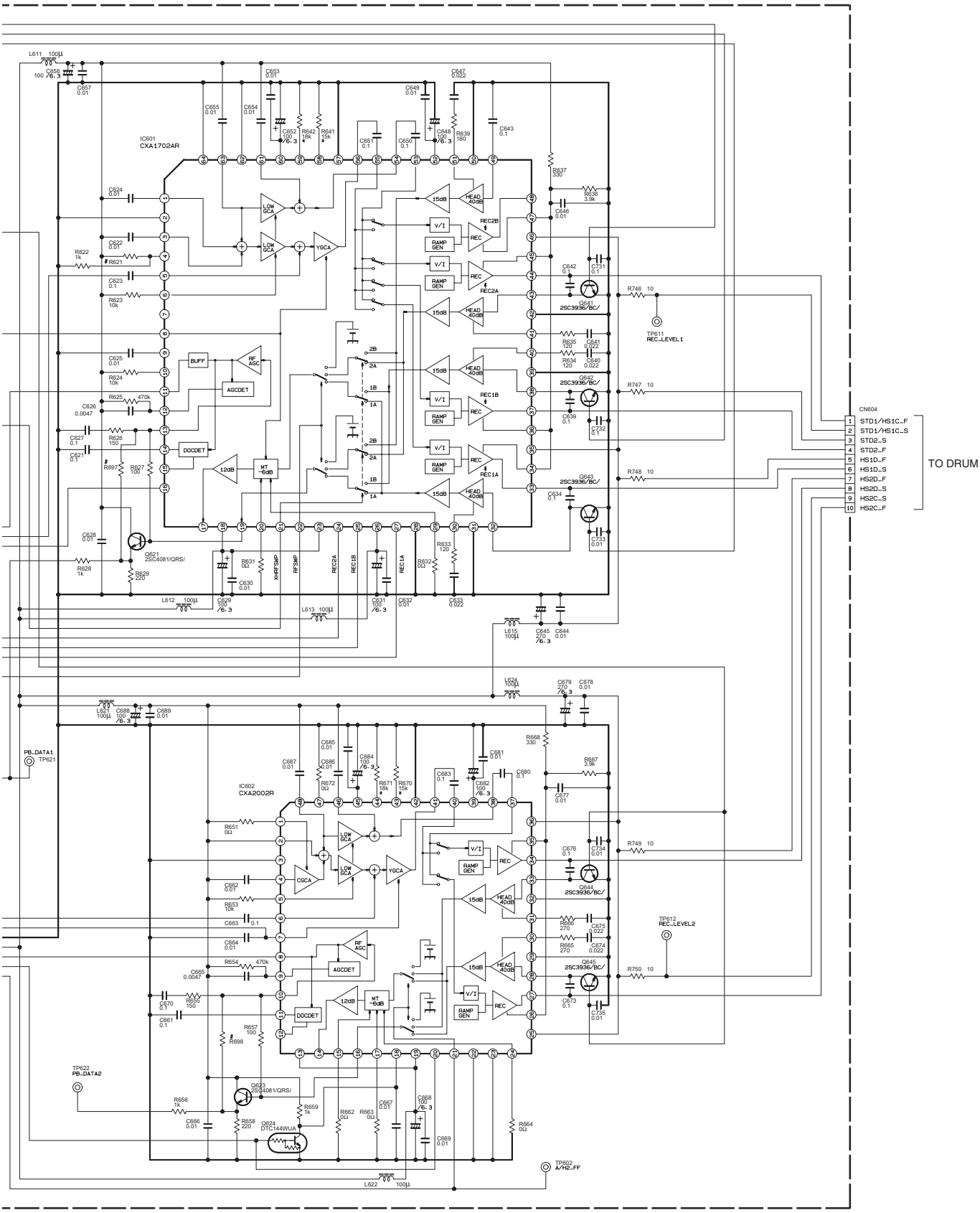


p10648001a_rev0

SHEET 9

■ PRE/REC SCHEMATIC DIAGRAM

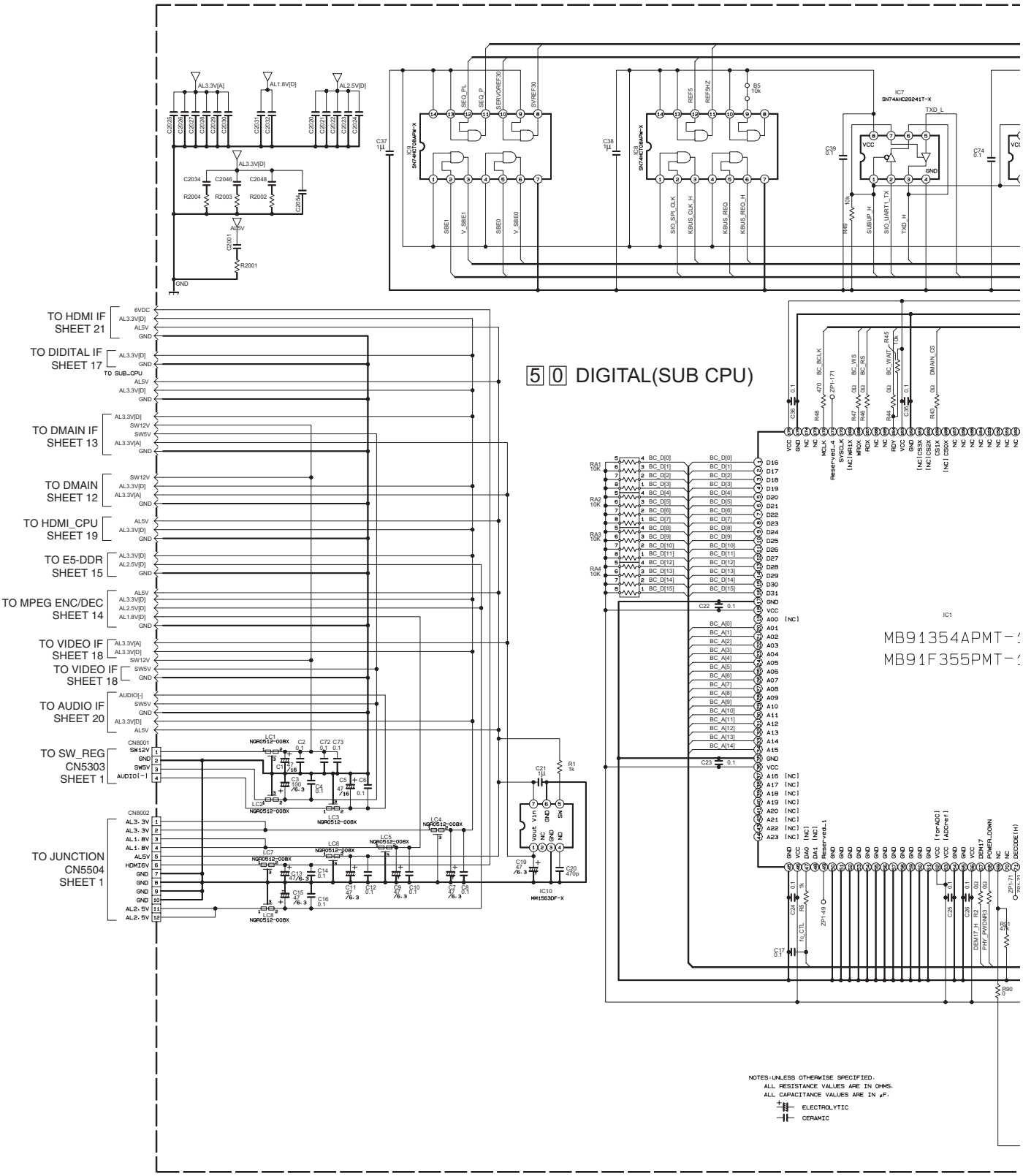


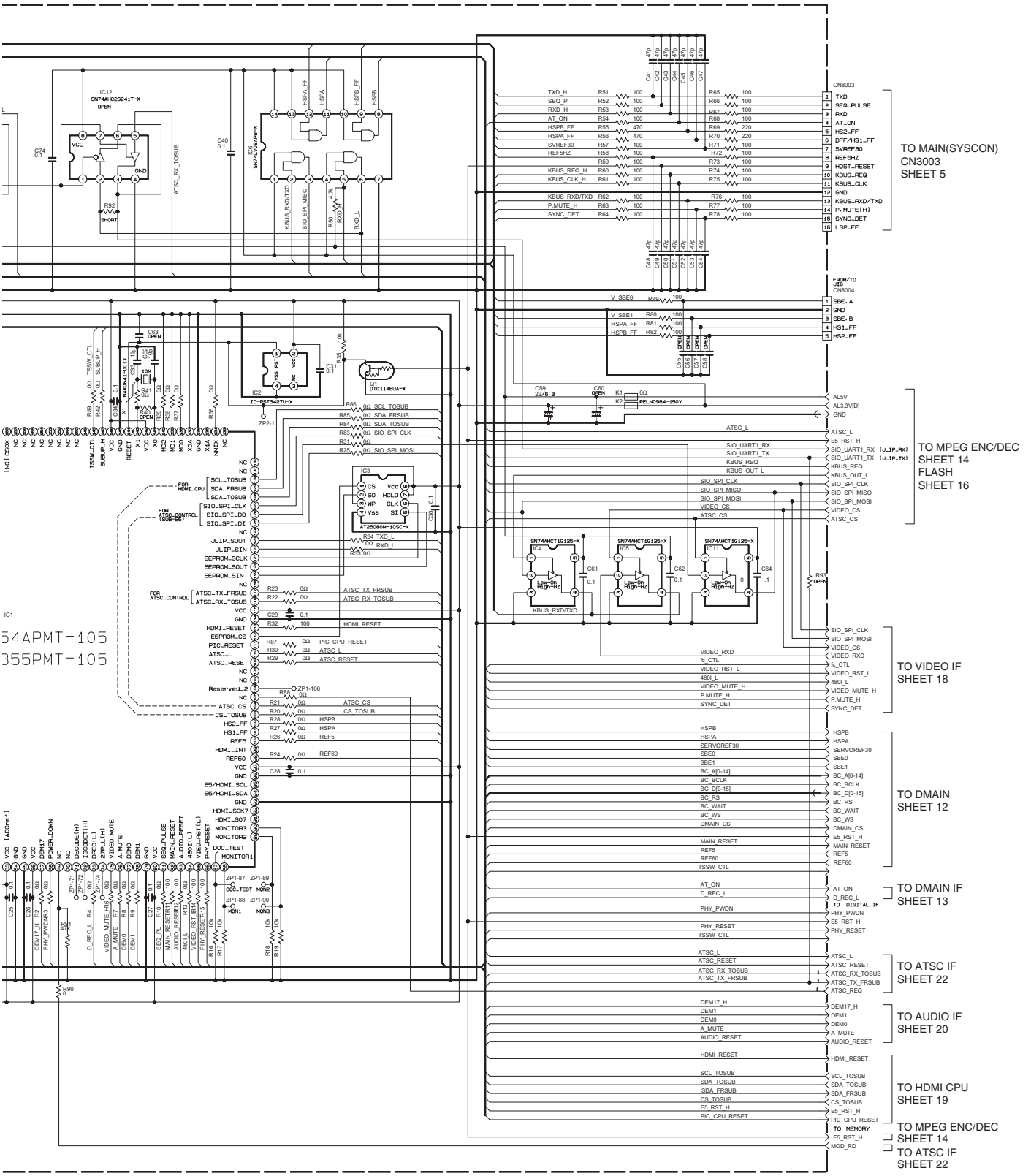


p10418001a_rev0

SHEET 10

■ DIGITAL(SUB CPU) SCHEMATIC DIAGRAM

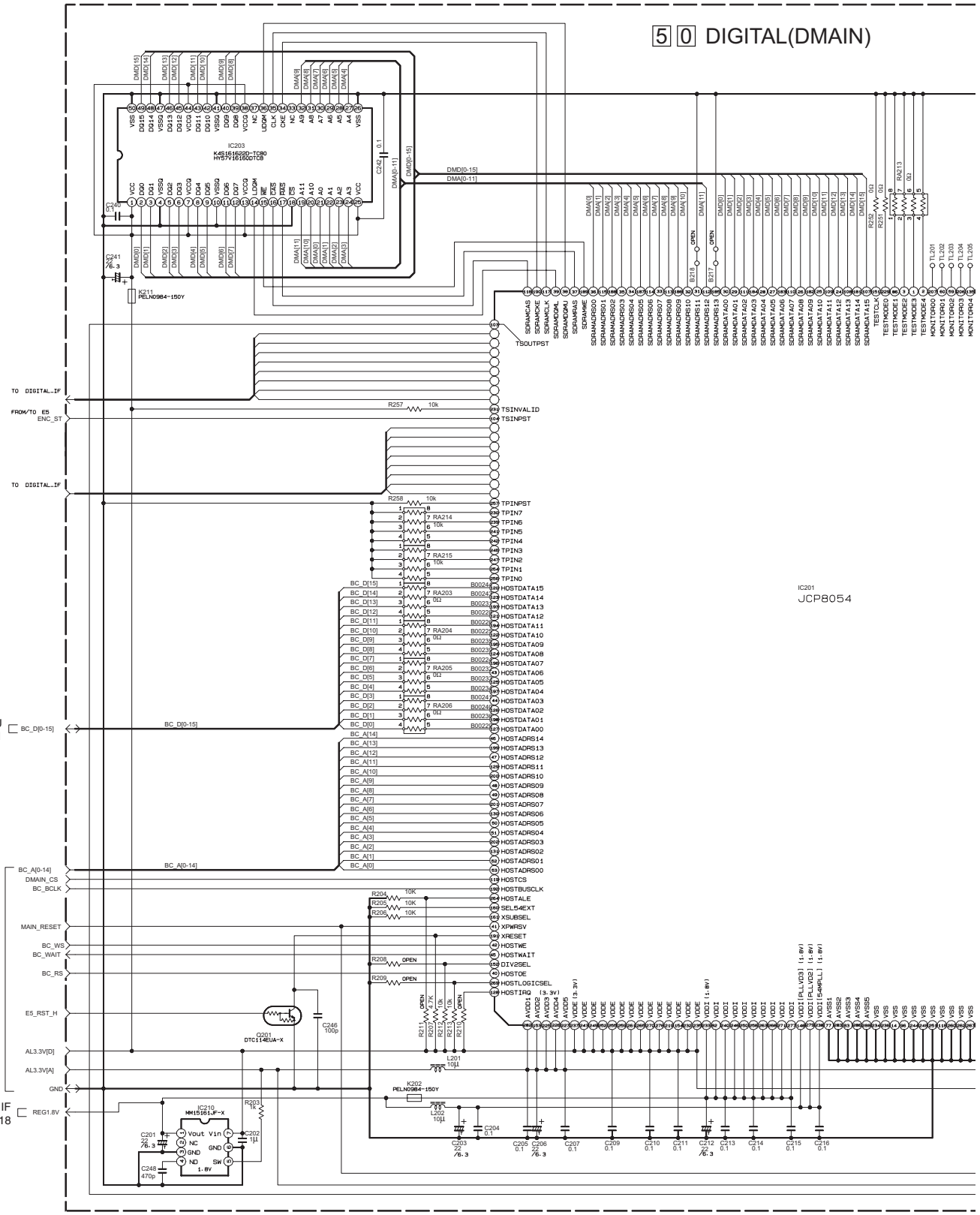

5 0 DIGITAL(SUB CPU)
TO HDMI IF SHEET 21
TO DIDITAL IF SHEET 17
TO DMAIN IF SHEET 13
TO DMAIN SHEET 12
TO HDMI_CPU SHEET 19
TO E5-DDR SHEET 15
TO MPEG ENC/DEC SHEET 14
TO VIDEO IF SHEET 18
TO VIDEO IF SHEET 18
TO AUDIO IF SHEET 20
TO SW_REG CN5303 SHEET 1
TO JUNCTION CN5504 SHEET 1
MB91354APMT-1
MB91F355PMT-1
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC

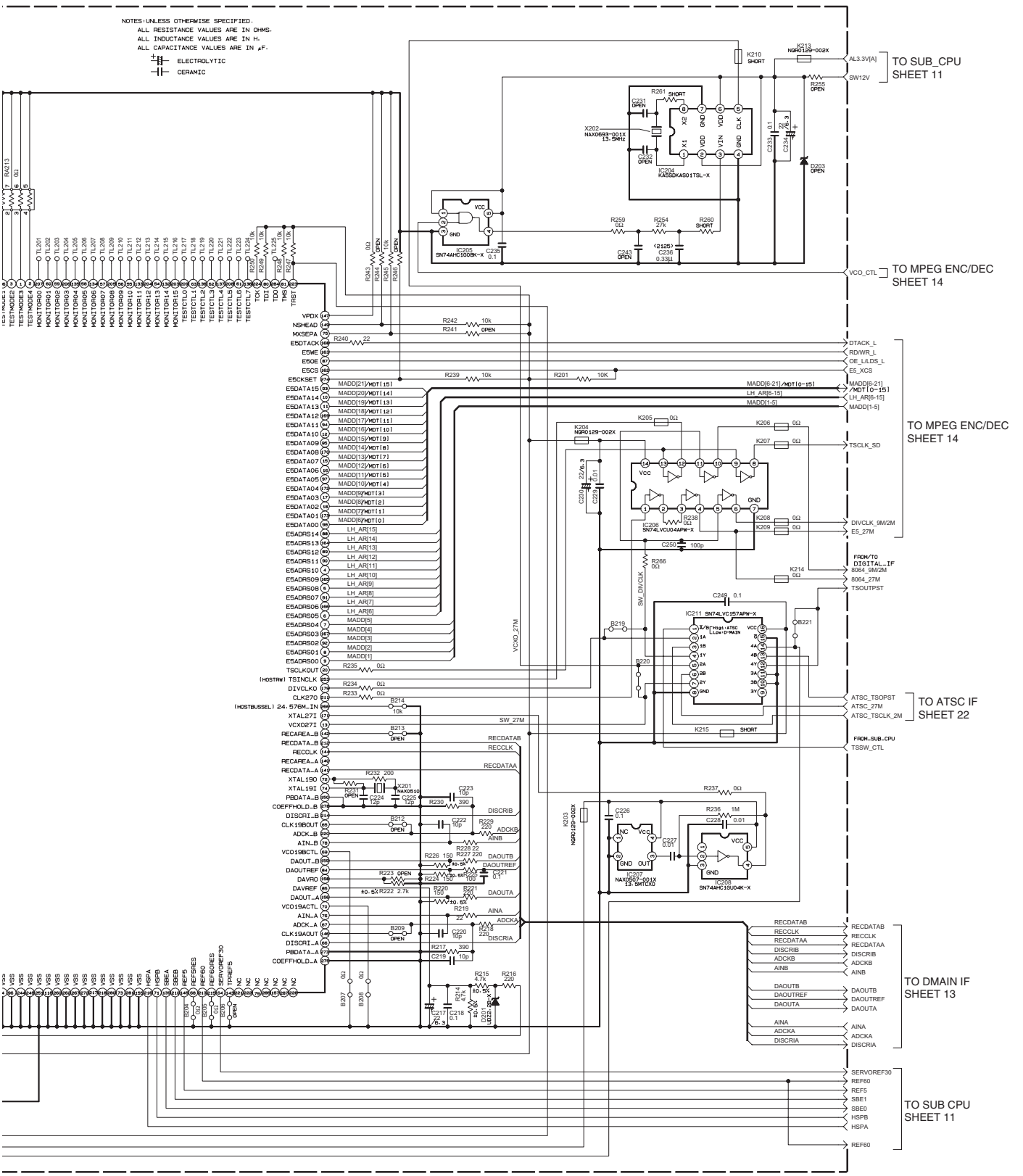


p10639001a_rev0

SHEET 11

■ DIGITAL(DMAIN) SCHEMATIC DIAGRAM

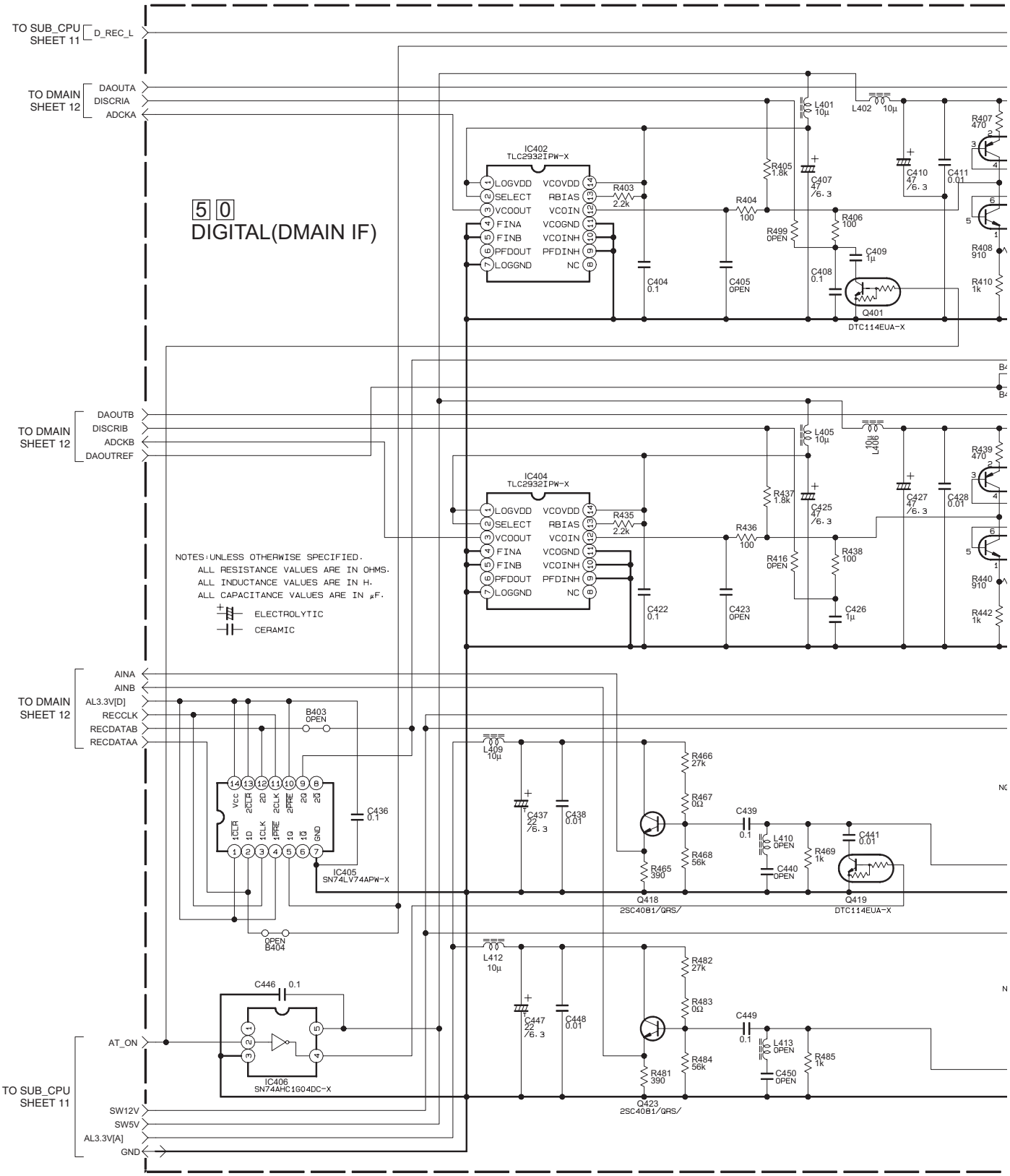


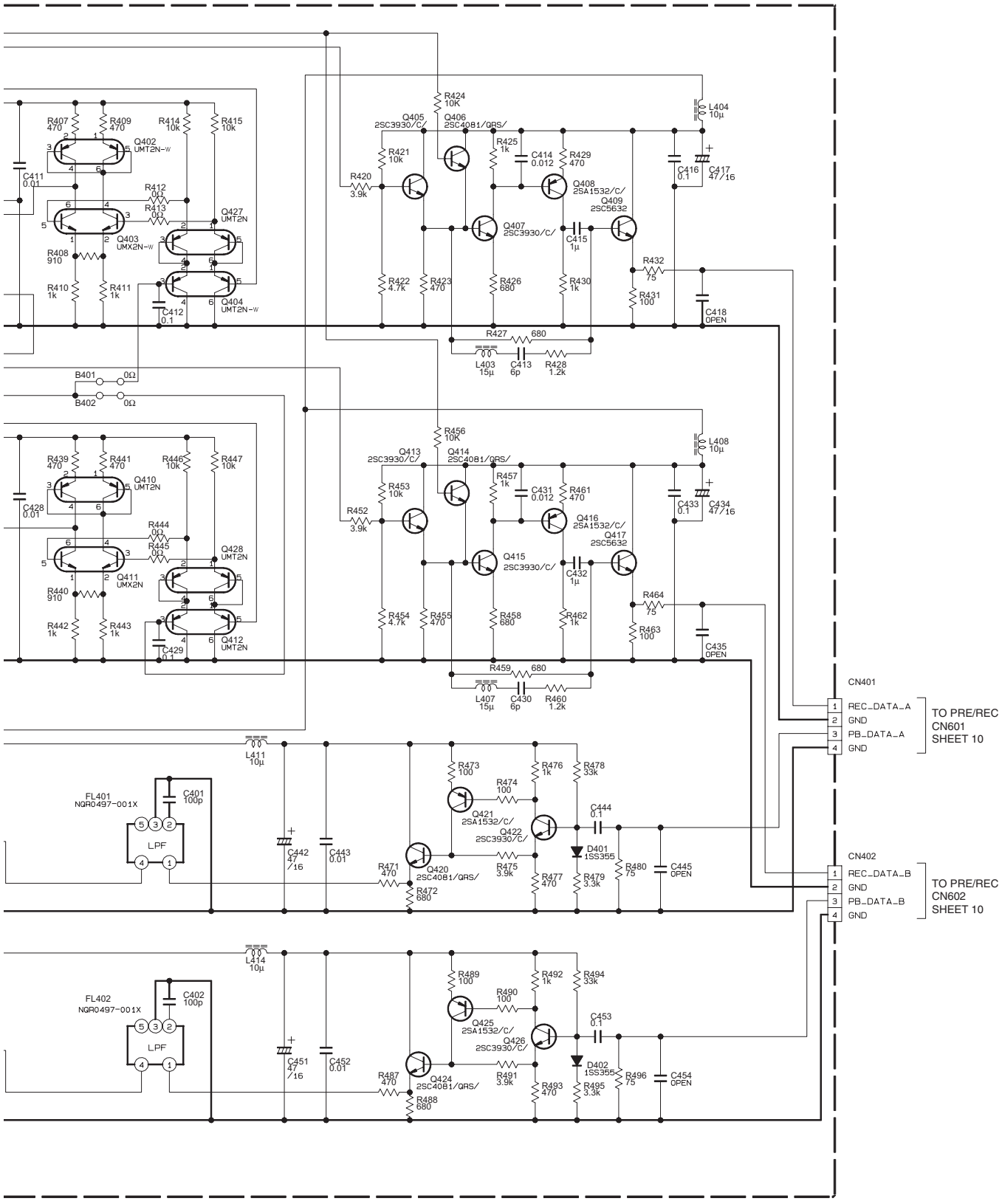


p10640001a_rev0

SHEET 12

■ DIGITAL(DMAIN IF) SCHEMATIC DIAGRAM

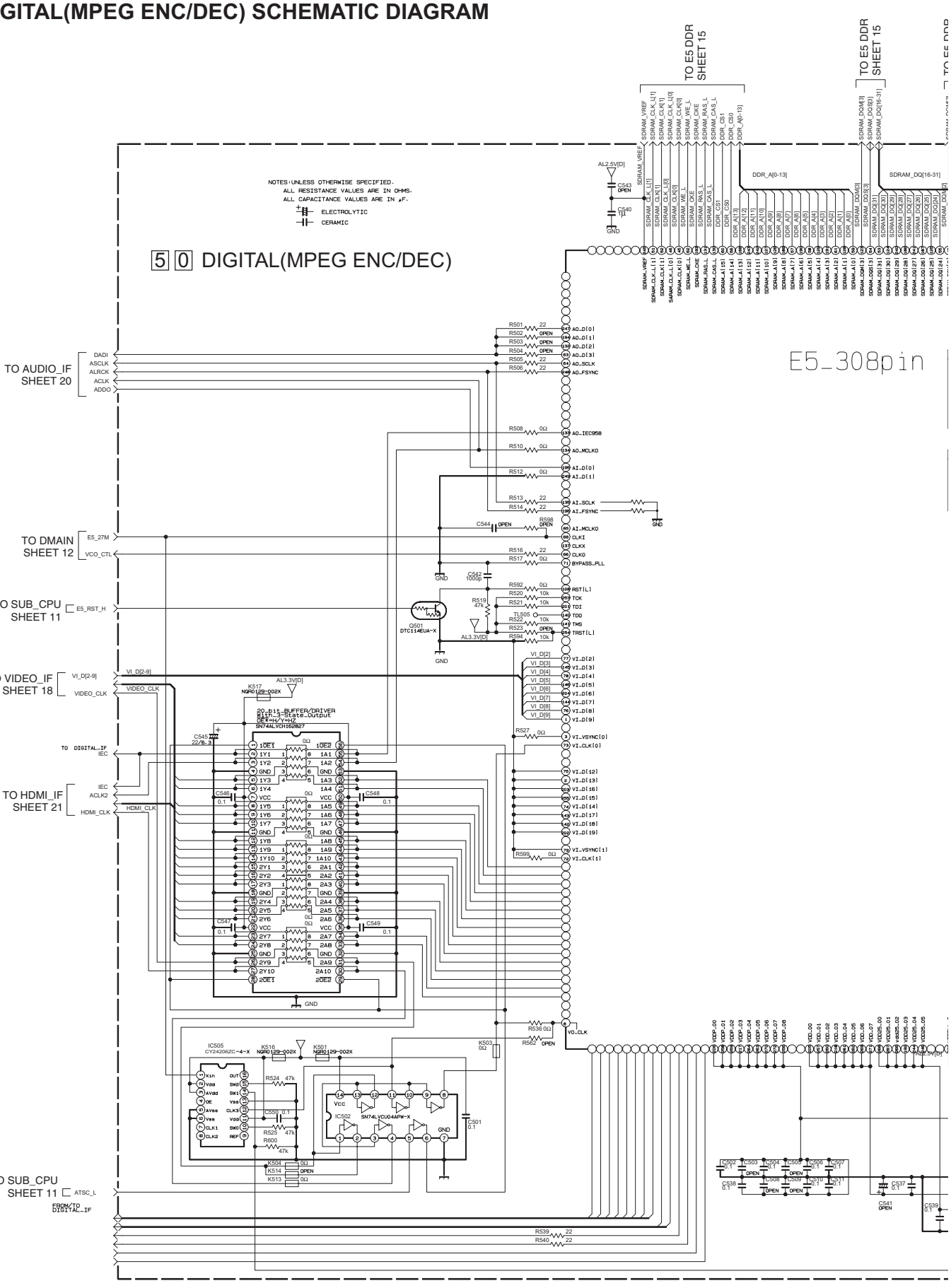


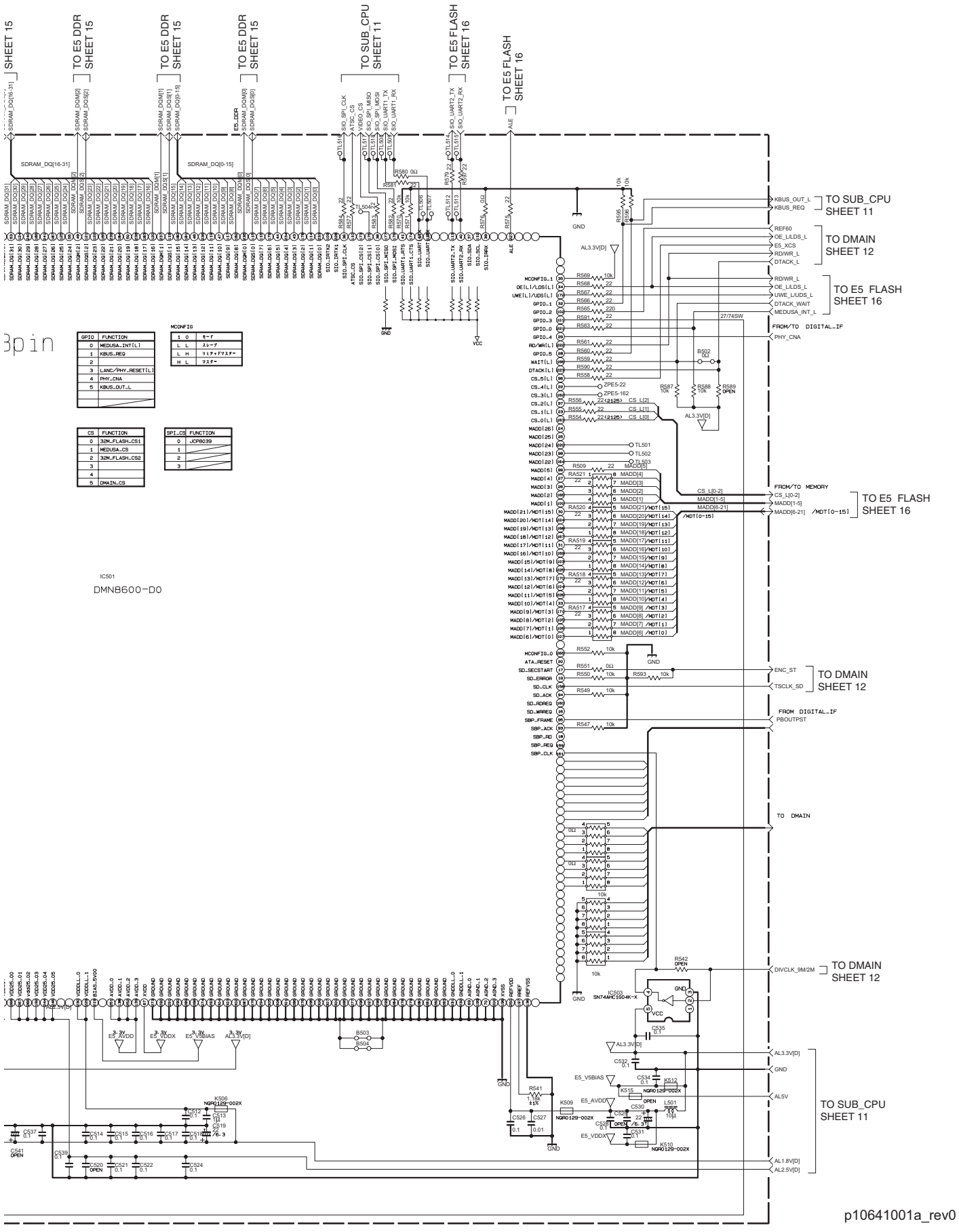


p20427001a_rev0

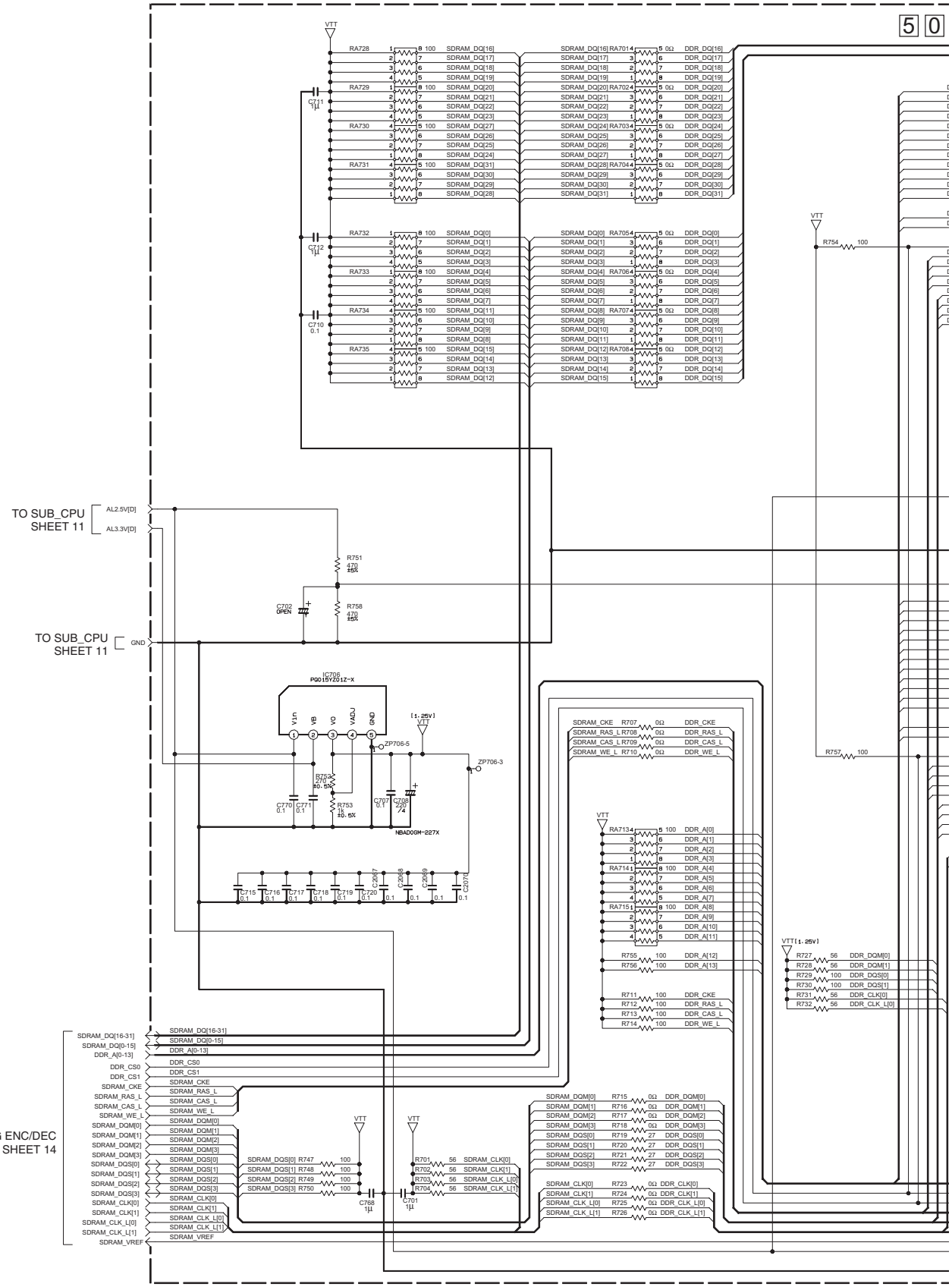
SHEET 13

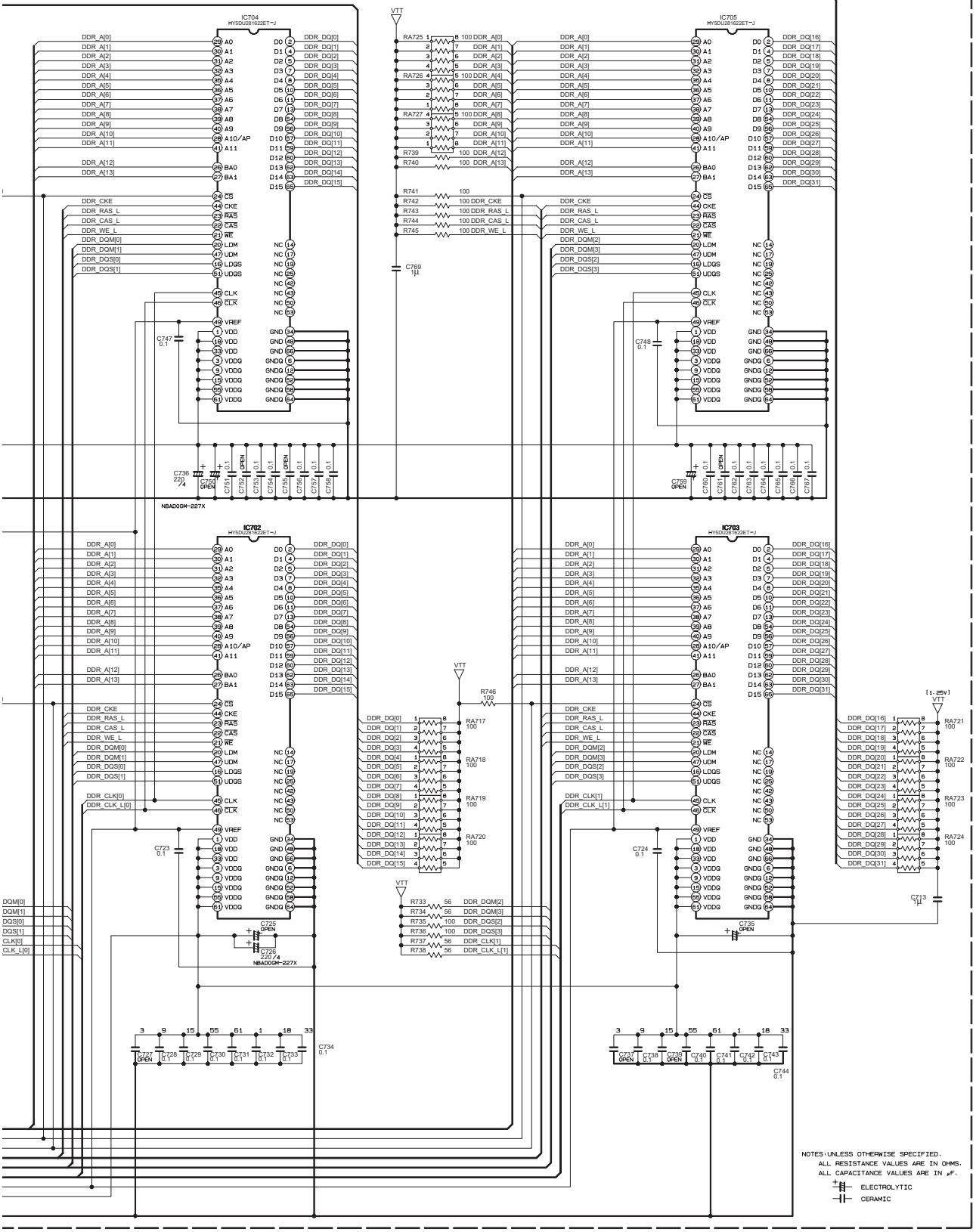
■ DIGITAL(MPEG ENC/DEC) SCHEMATIC DIAGRAM




SHEET 15
TO E5 DDR SHEET 15
TO E5 DDR SHEET 15
TO E5 DDR SHEET 15
TO SUB_CPU SHEET 11
TO E5 FLASH SHEET 16
TO E5 FLASH SHEET 16
SDRAM_DQ[16-31]
SDRAM_DQ[0-15]
TO SUB_CPU SHEET 11
TO DMAIN SHEET 12
TO E5 FLASH SHEET 16
TO E5 FLASH SHEET 16
TO DMAIN SHEET 12
TO DMAIN SHEET 12
TO SUB_CPU SHEET 11
IC501
DMN8600-D0
IC503
SN74AHC1G04K-X
p10641001a_rev0
SHEET 14

■ DIGITAL(E5 DDR) SCHEMATIC DIAGRAM

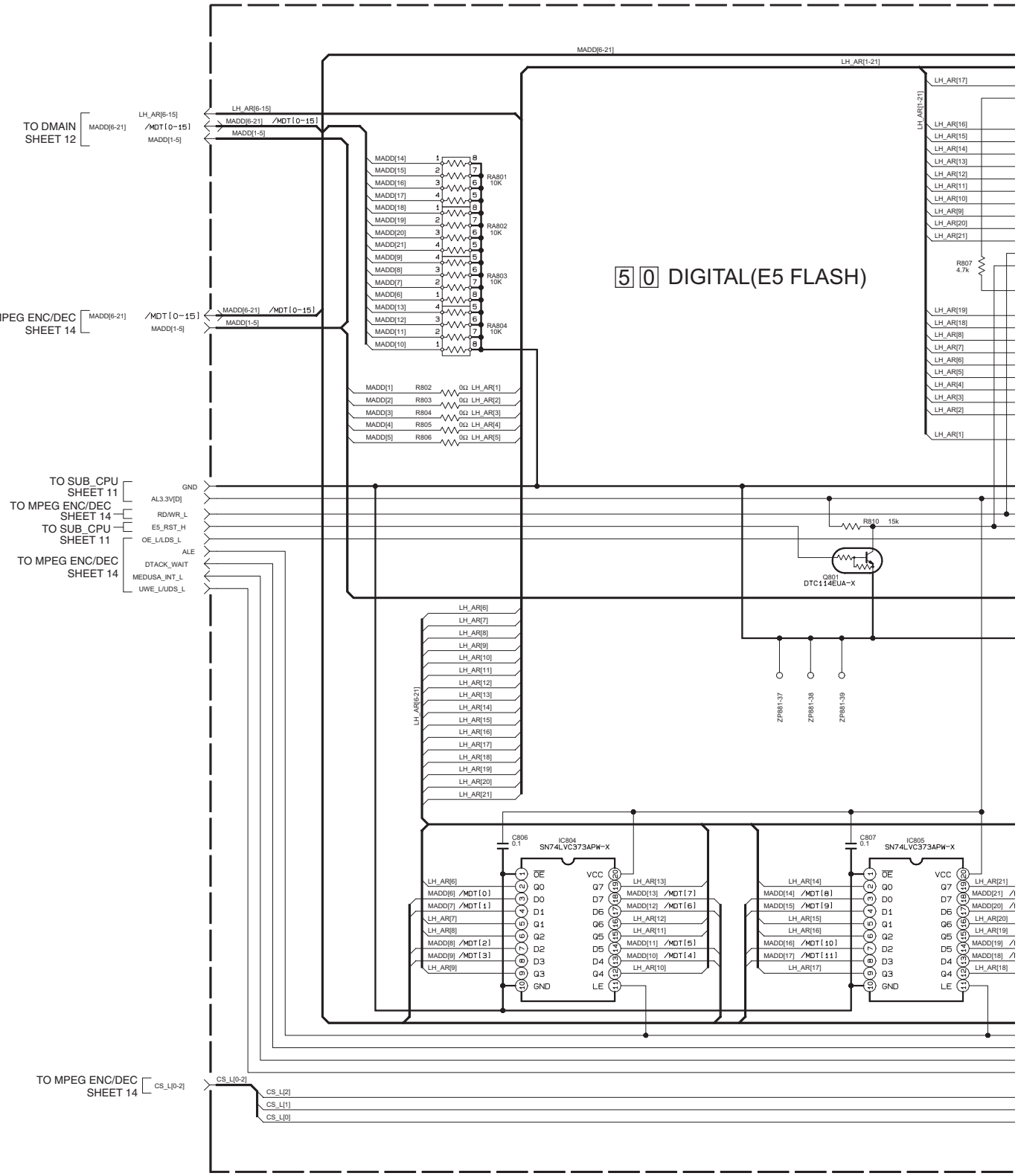


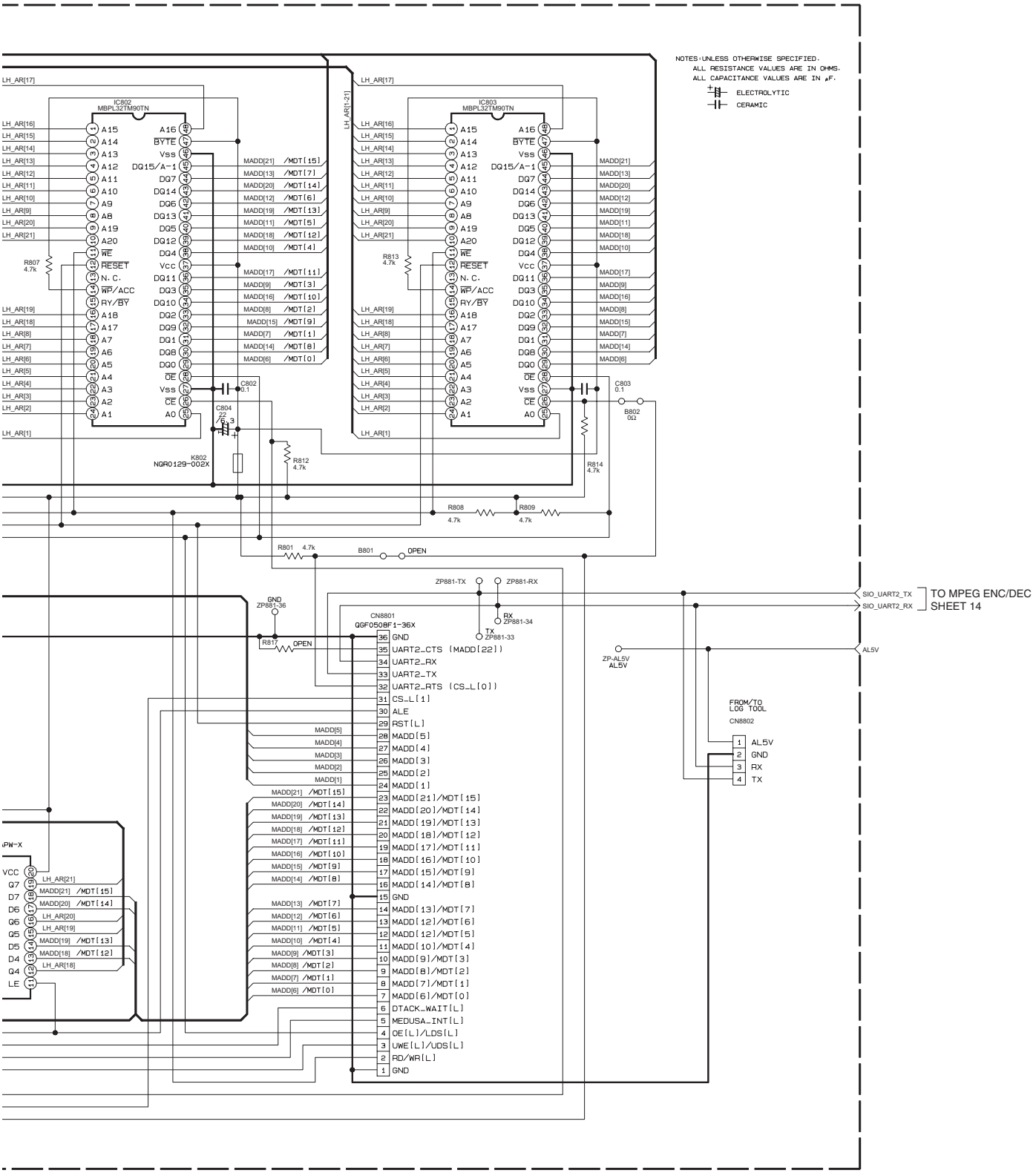


p10642001a_rev0

SHEET 15

■ DIGITAL(E5 FLASH) SCHEMATIC DIAGRAM

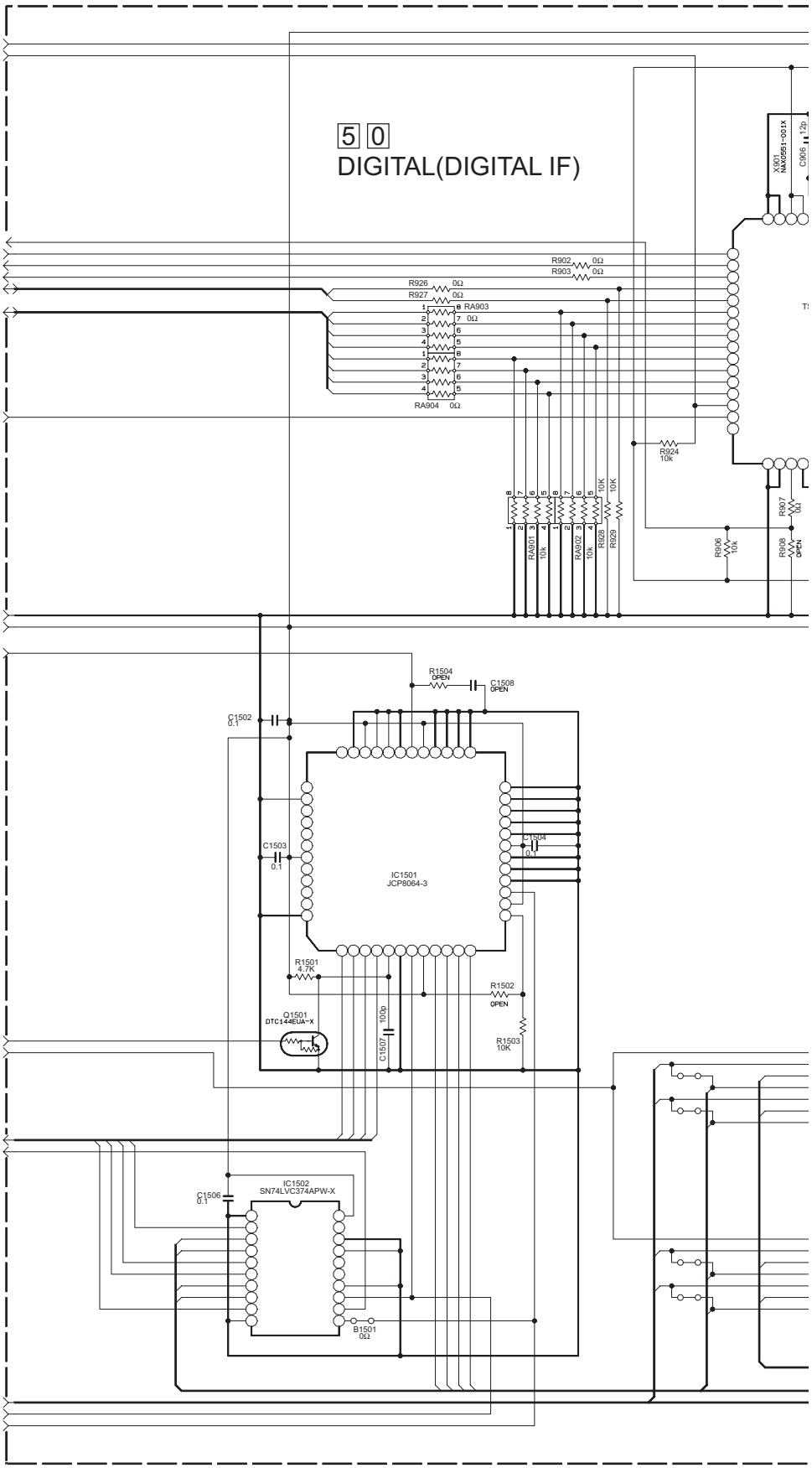


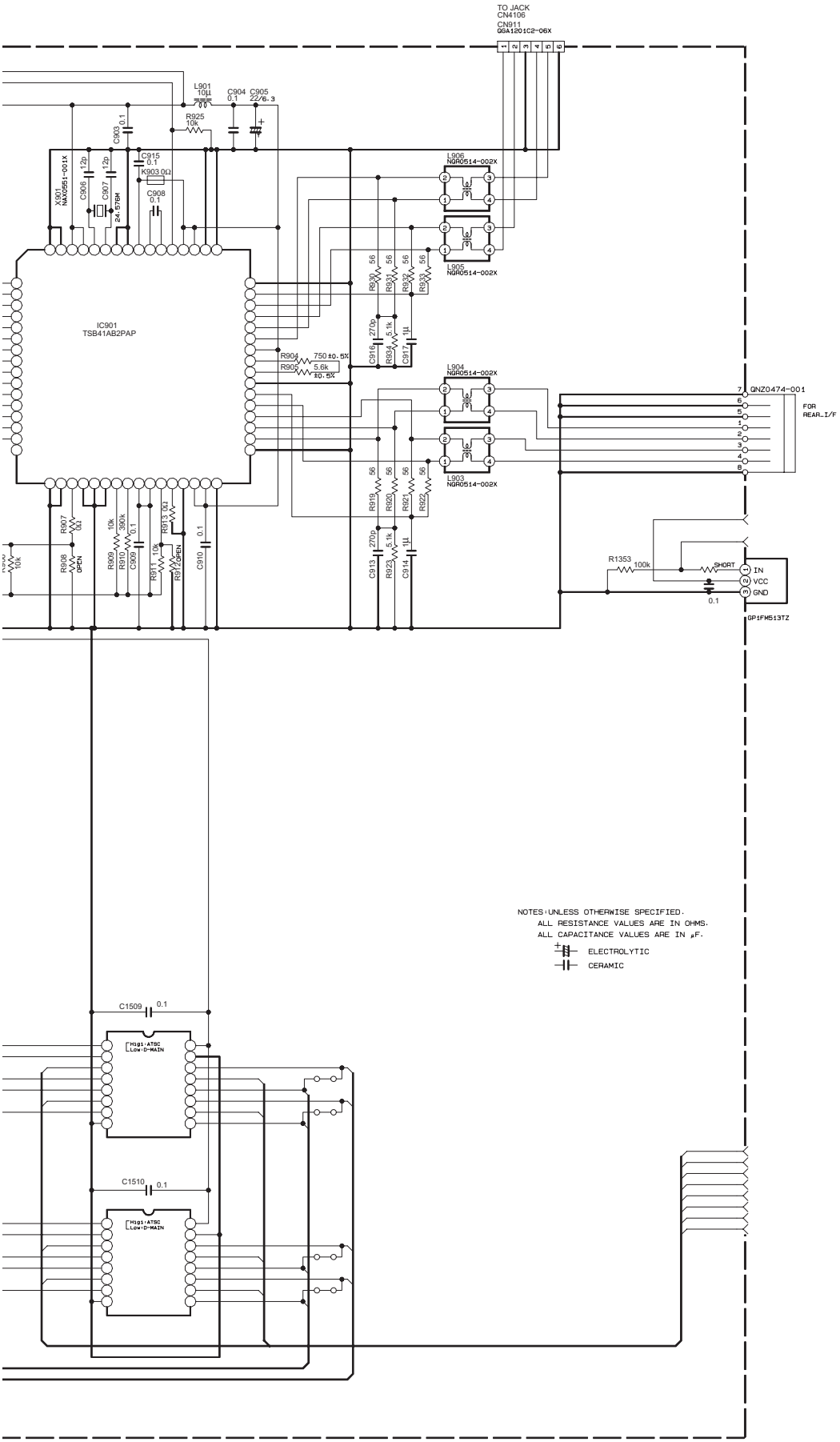


p10643001a_rev0

SHEET 16

■ DIGITAL(DIGITAL IF) SCHEMATIC DIAGRAM

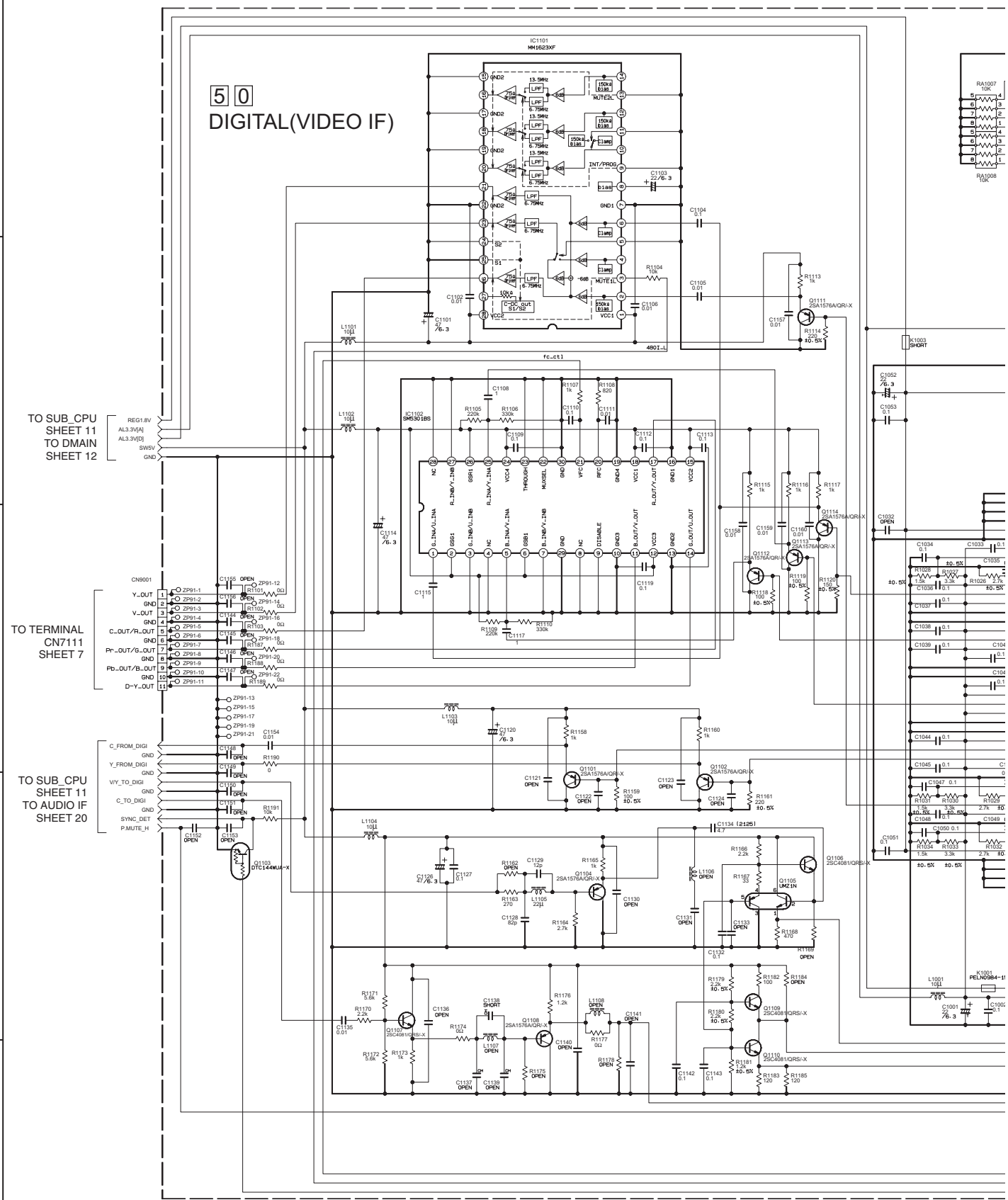


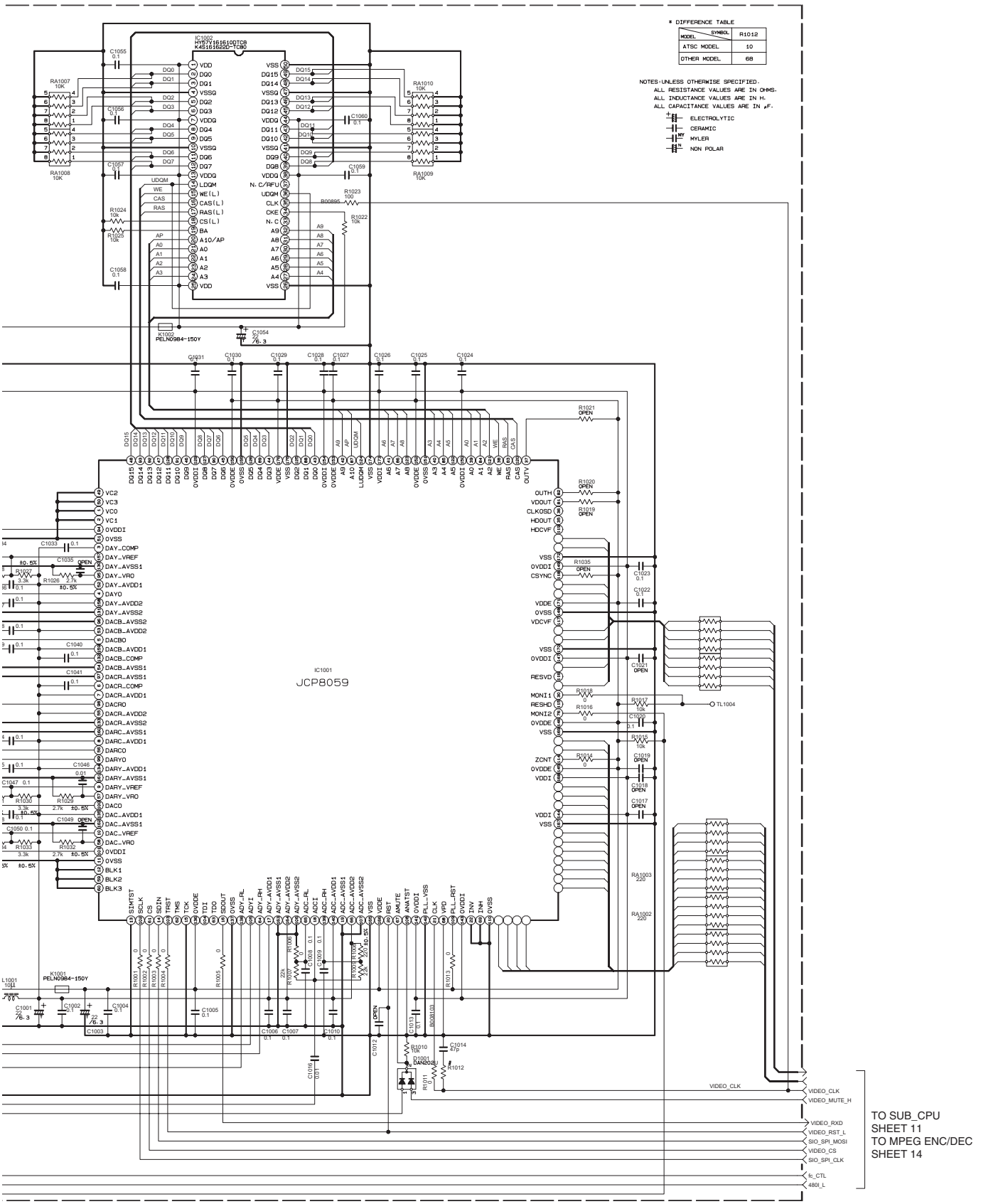


p10644001a_rev0

SHEET 17

■ DIGITAL(VIDEO IF) SCHEMATIC DIAGRAM

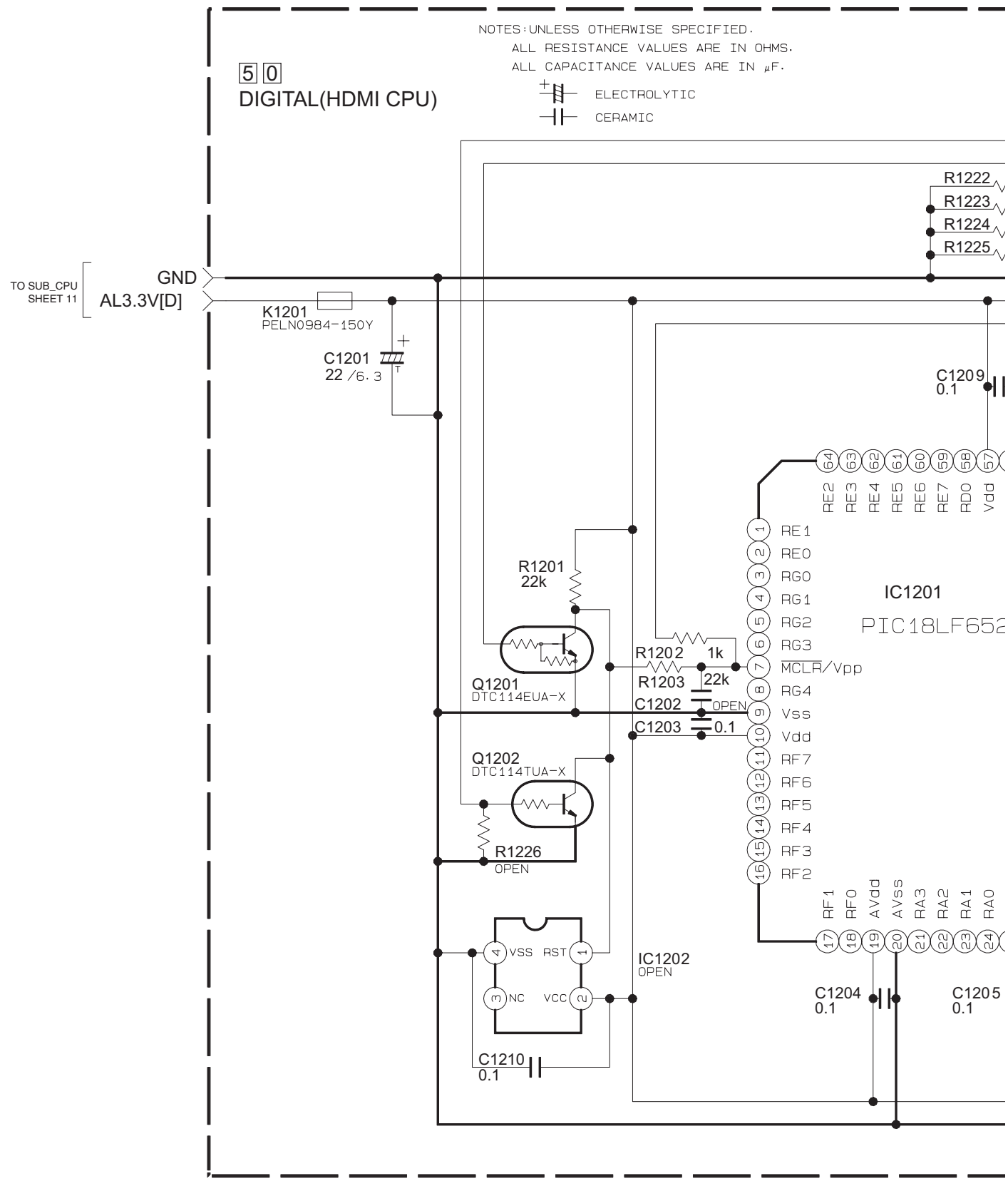


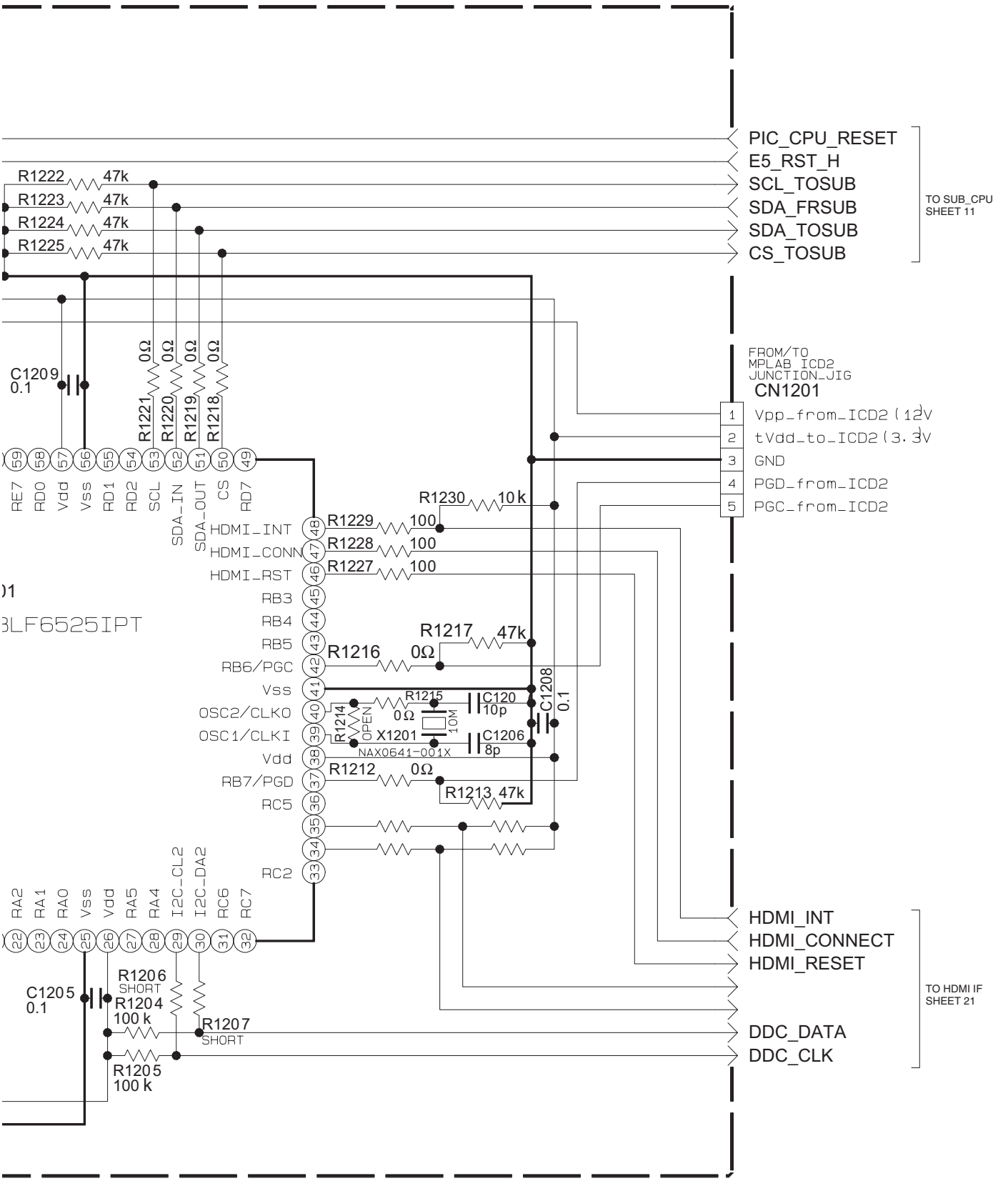


p10645001a_rev0

SHEET 18

■ DIGITAL(HDMI CPU) SCHEMATIC DIAGRAM

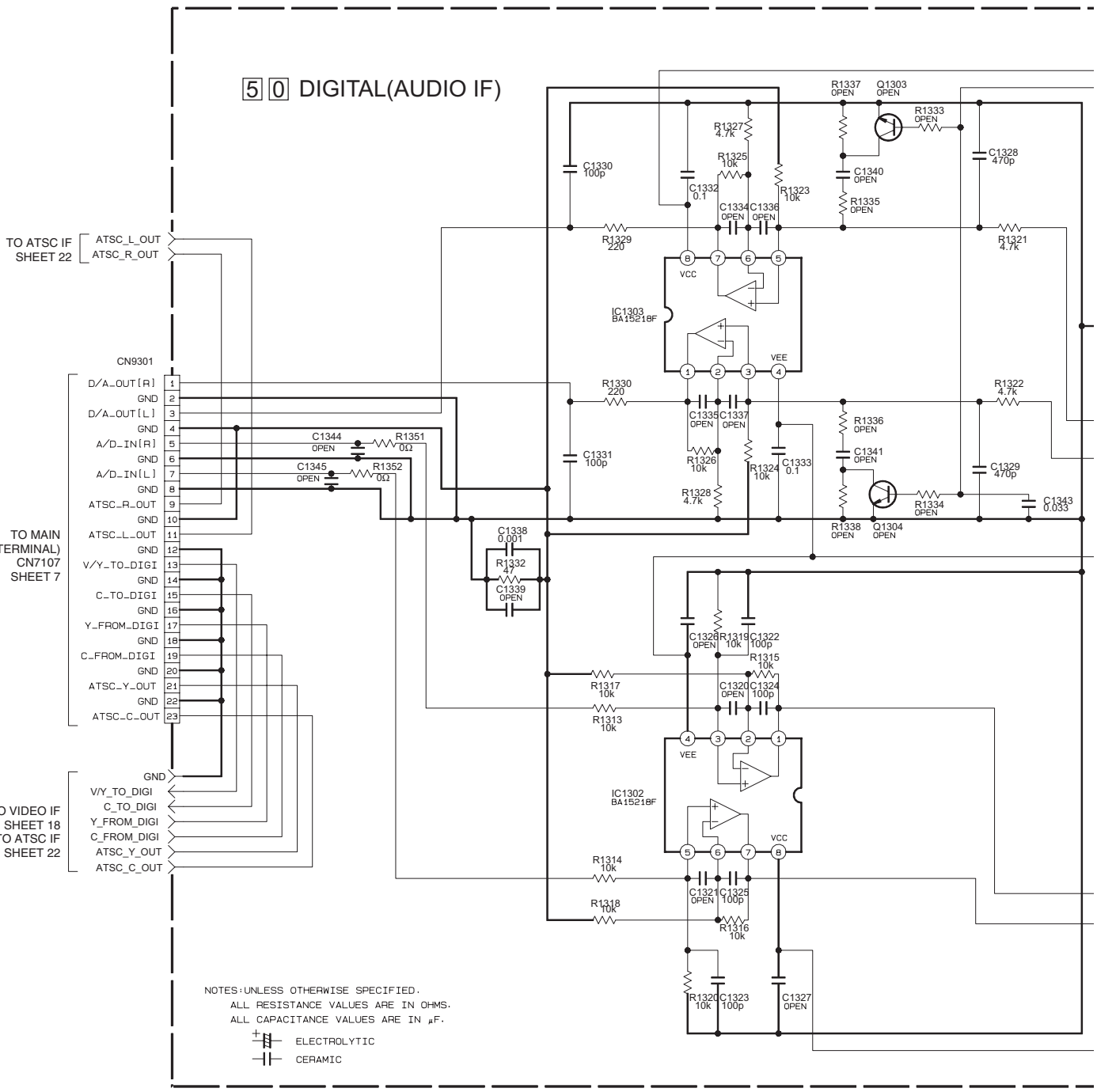


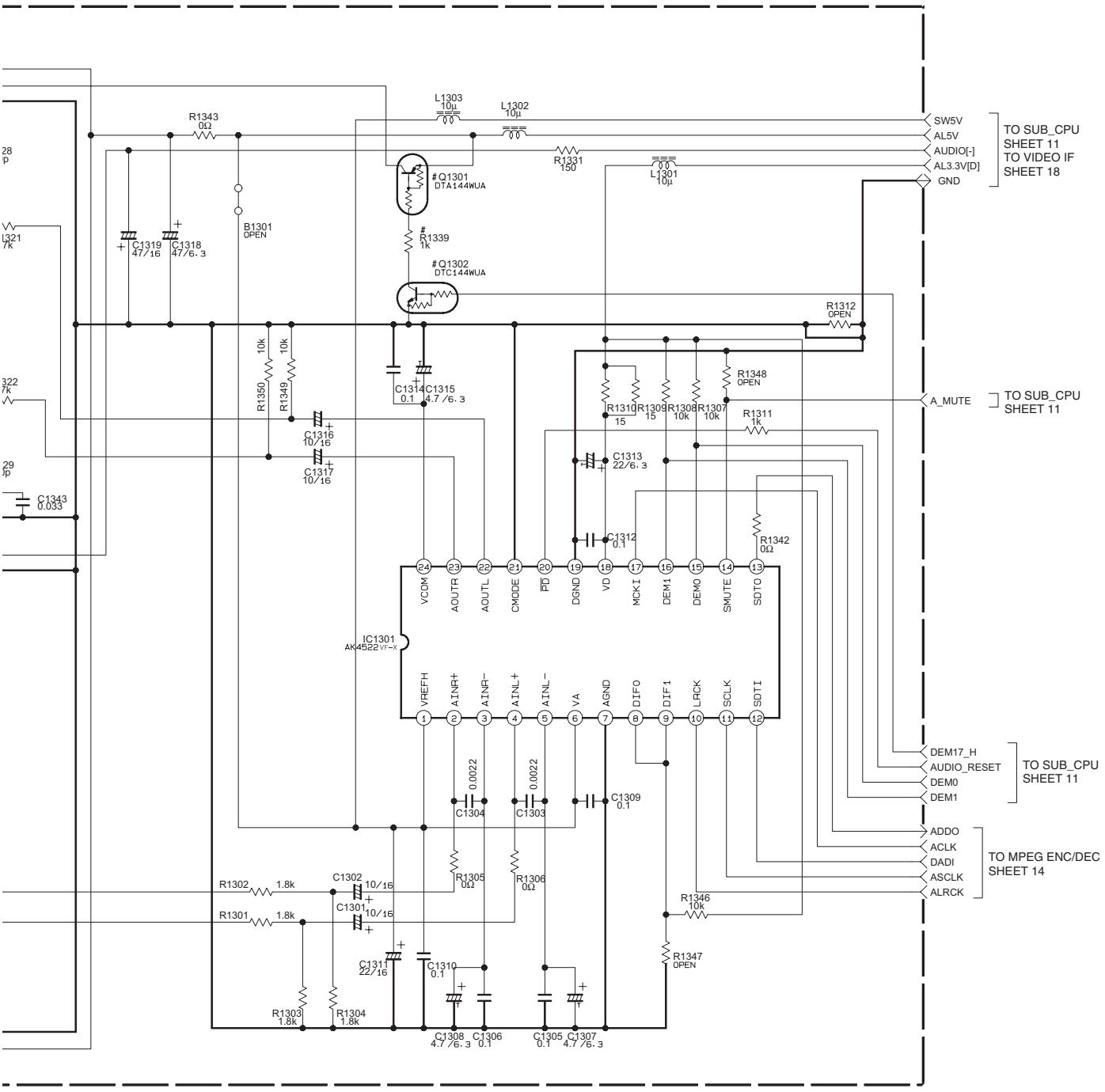


p30126001a_rev0

SHEET 19

■ DIGITAL(AUDIO IF) SCHEMATIC DIAGRAM

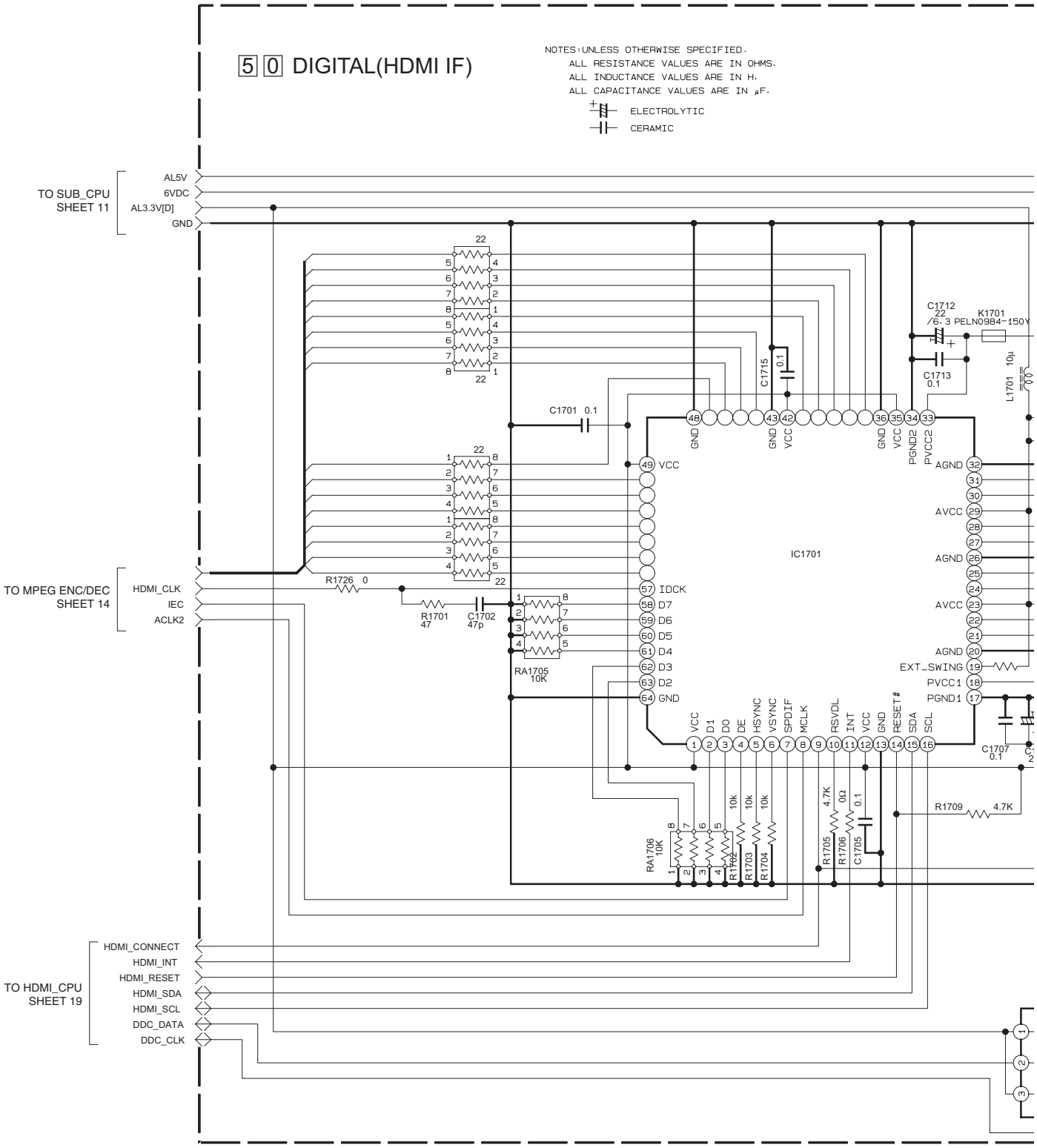


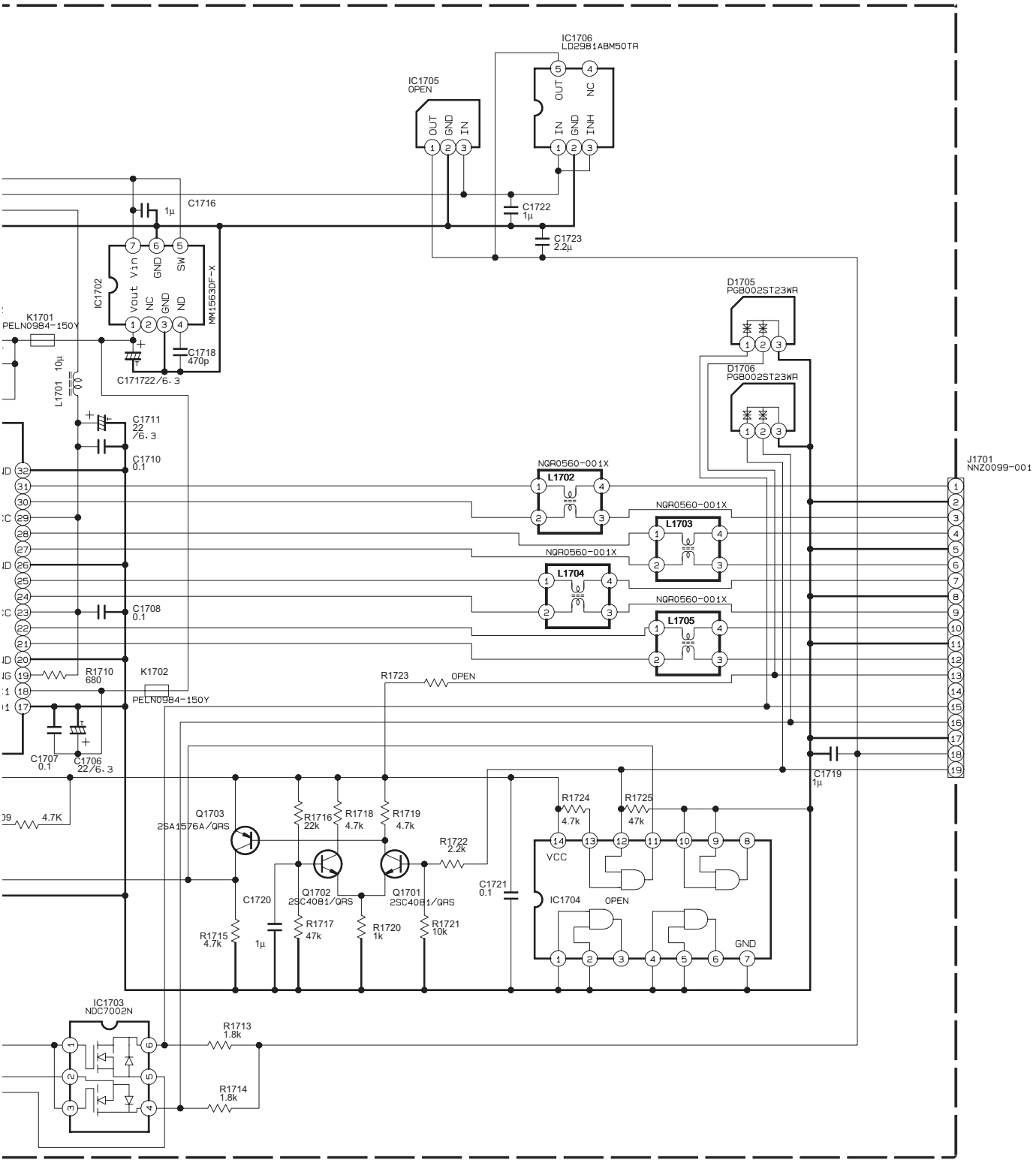


p20428001a_rev0

SHEET 20

■ DIGITAL(HDMI IF) SCHEMATIC DIAGRAM

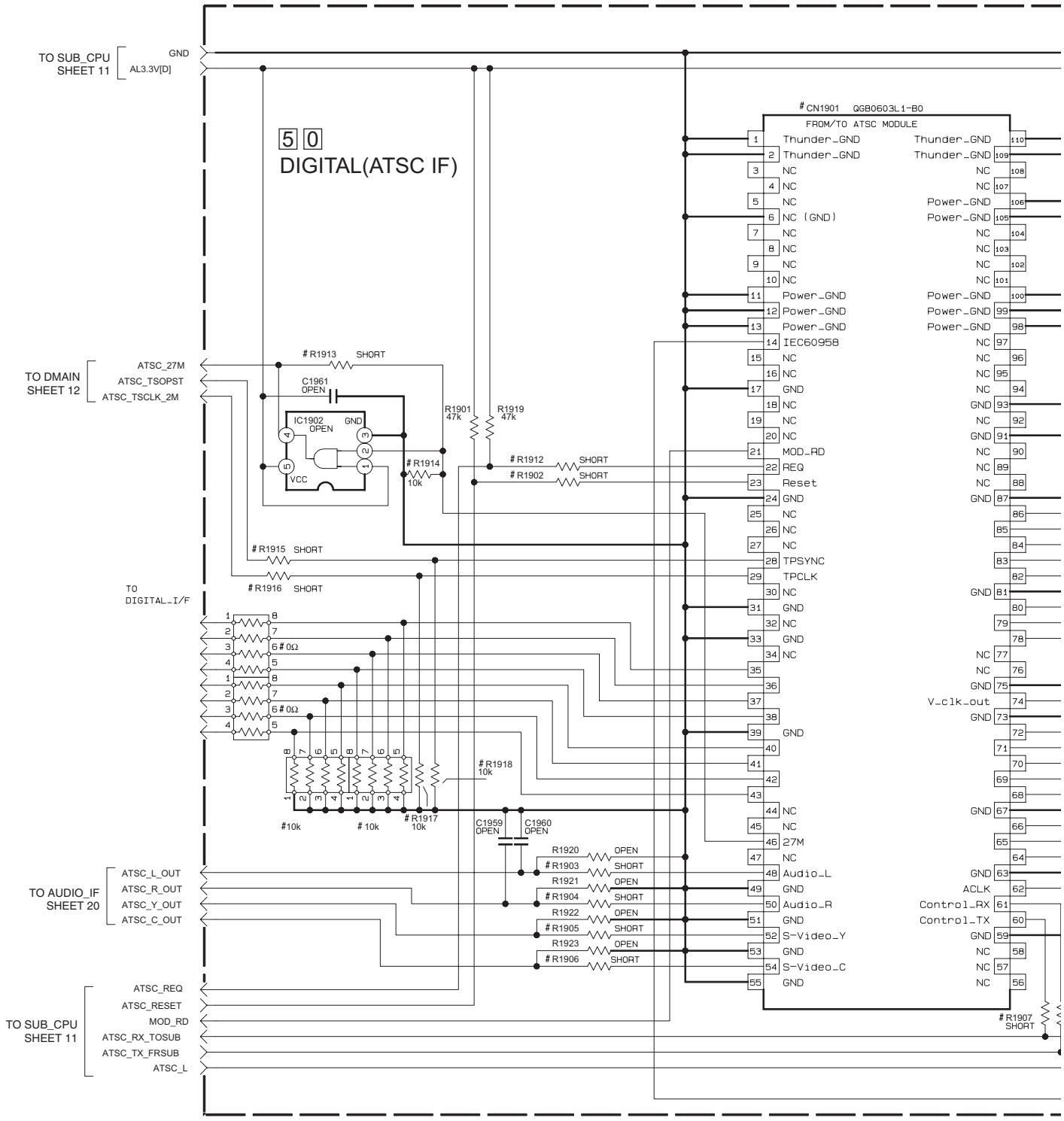


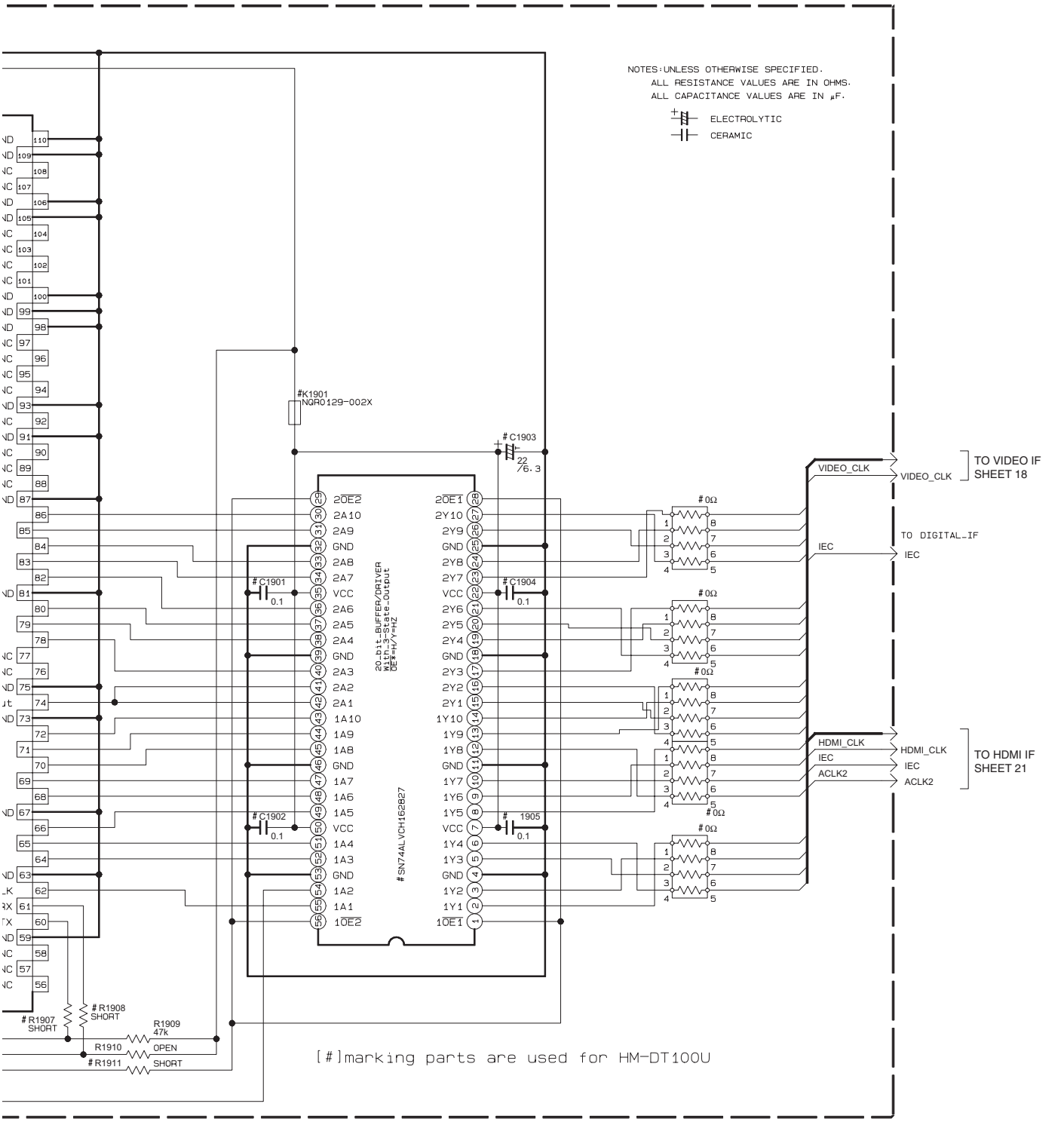


p20429001a_rev0

SHEET 21

■ DIGITAL(ATSC IF) SCHEMATIC DIAGRAM





p20430001a_rev0

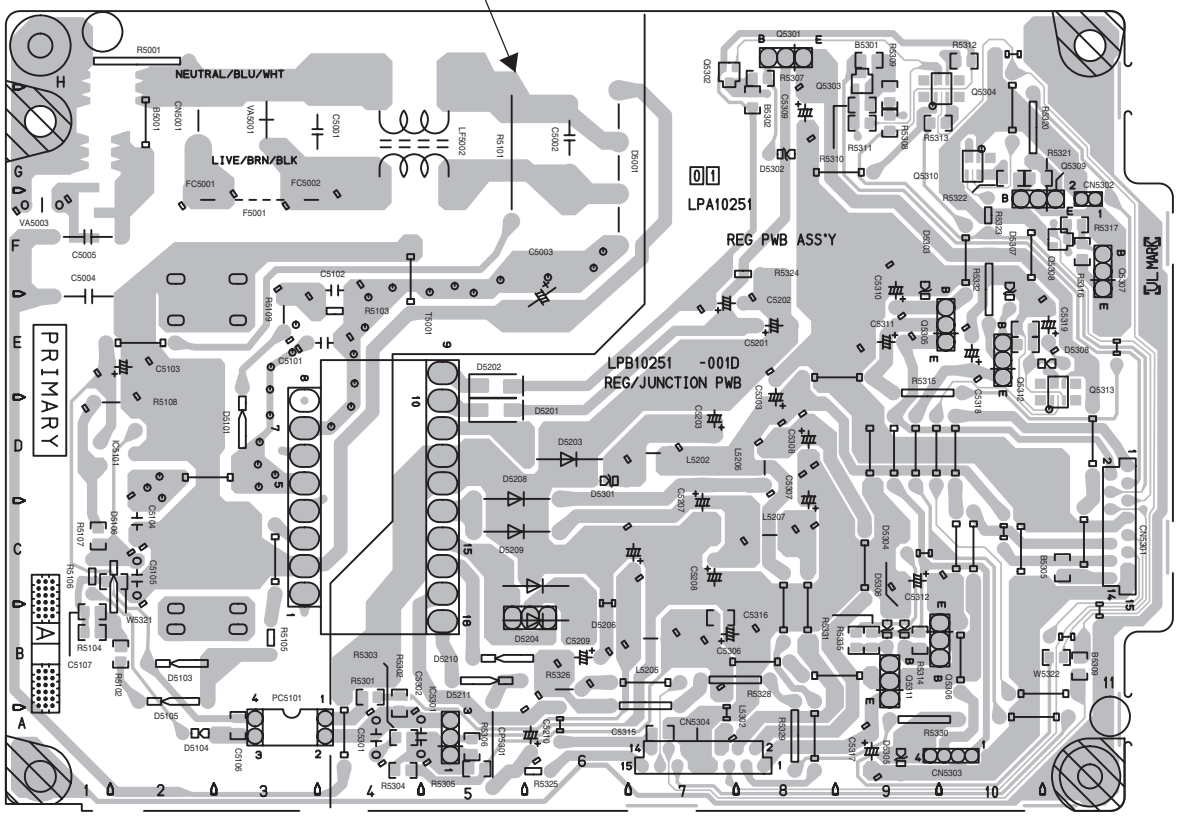
SHEET 22

■ SWITCHING REGULATOR CIRCUIT BOARD

DANGEROUS VOLTAGE

<01> SWITCHING REGULATOR
LPB10251-001D

CAUTION :
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATED FUSE(S).
ATTENTION :
REPLACER PAR DES FUSIBLE DE MEME TYPE.

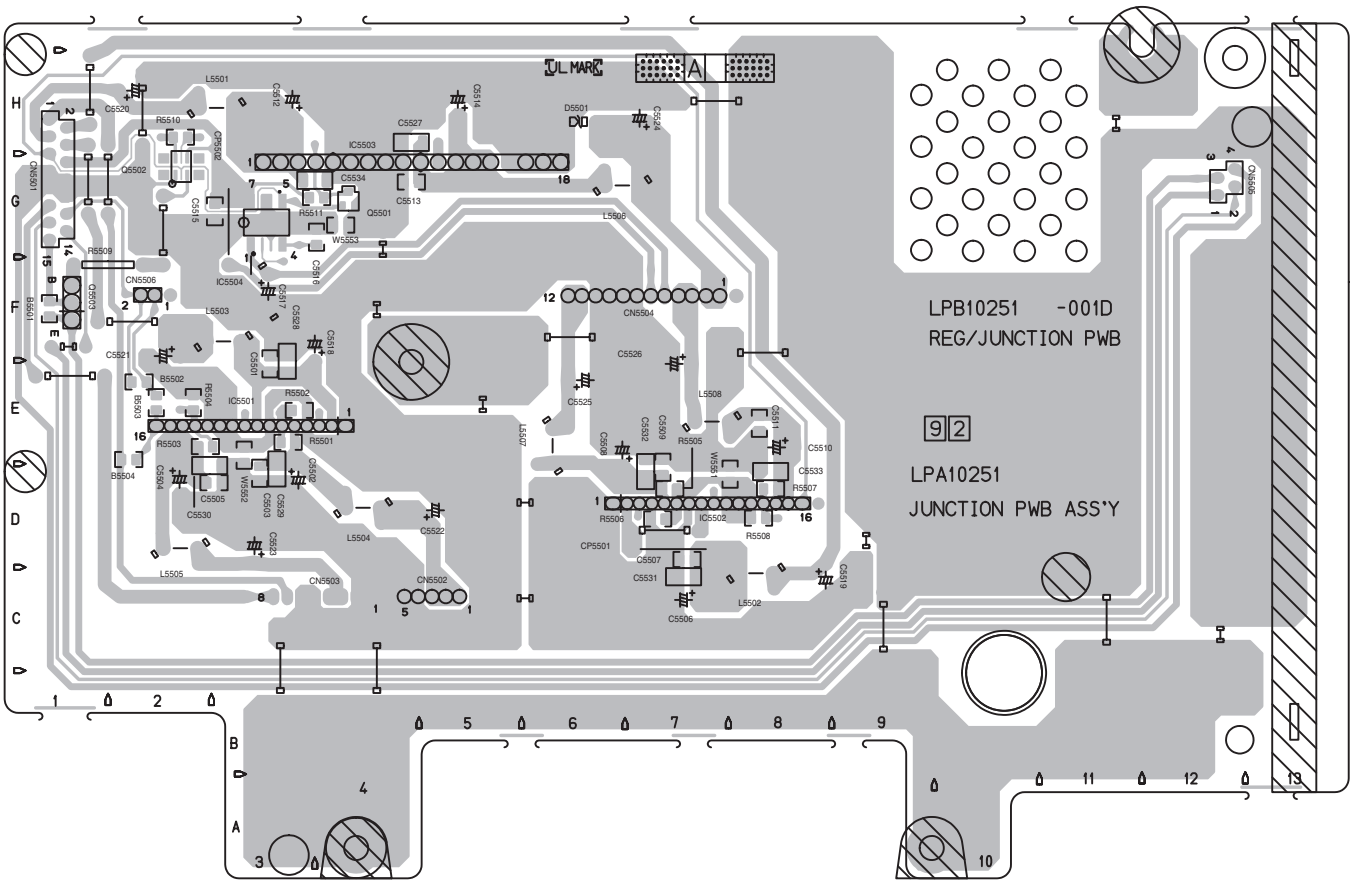


COMPONENT PARTS LOCATION GUIDE <SWITCHING REGULATOR> LPB10251-001D

REF.NO.	LOCATION
CAPACITOR	
C5001	A D 4G
C5002	A D 6G
C5003	A D 6F
C5004	A D 1E
C5005	A D 1F
C5101	A D 3E
C5102	A D 4F
C5103	A D 1E
C5104	A D 2C
C5105	A D 2C
C5106	B C 3A
C5107	B C 1B
C5201	A D 8E
C5202	A D 7E
C5203	A D 7D
C5206	A D 7C
C5207	A D 7D
C5208	A D 7C
C5209	A D 6B
C5210	A D 6A
C5301	A D 4A
C5302	A D 5A
C5303	A D 8D
C5306	A D 7B
C5307	A D 8C
C5308	A D 8D
C5309	A D 8G
C5310	A D 9E
C5311	A D 9E
C5312	A D 9C
C5315	B C 7A
C5316	B C 7B
C5317	A D 9A
C5318	A D 10E
C5319	A D 11E
CONNECTOR	
CN5001	A D 2G
CN5301	A D 11D
CN5302	A D 11F
CN5303	A D 10A
CN5304	A D 8A
DIODE	
D5001	A D 6F
D5101	A D 3D
D5103	A D 3B
D5104	A D 3A
D5105	A D 2B
D5106	A D 2B
D5201	B C 5D
D5202	B C 5E
D5203	A D 6D
D5204	A D 5B
D5206	A D 5B
D5207	A D 5C
D5208	A D 5D
D5209	A D 5C
D5210	A D 6B
D5211	A D 5B
D5301	A D 6D
D5302	A D 8G
D5303	A D 9F
D5304	A D 9B
D5305	A D 9A
D5306	A D 9B
D5307	A D 10F
D5308	A D 11E
IC	
IC5101	A D 2D
IC5301	A D 5A
COIL	
L5202	A D 7D
L5205	A D 7B
L5206	A D 8D
L5207	A D 8C
L5302	A D 7A
TRANSISTOR	
Q5301	A D 8H
Q5302	B C 7H
Q5303	B C 9H
Q5304	B C 10G
Q5305	A D 10E
Q5306	A D 10B
Q5307	A D 11F
Q5308	B C 11F
Q5309	A D 11F
Q5310	B C 10G
Q5311	A D 9B
Q5312	A D 10E
Q5313	B C 11E
RESISTOR	
R5001	A D 1H
R5101	A D 5H
R5102	B C 2B
R5103	A D 4E
R5104	B C 1B
R5105	A D 3B
R5106	A D 1C
R5107	B C 1C
R5108	A D 1D
R5109	A D 3E
R5301	B C 4B
R5302	B C 4B
R5303	B C 4A
R5304	B C 4A
R5305	B C 5A
R5306	B C 5A
R5307	B C 8H
R5308	B C 9G
R5309	B C 9G
R5310	B C 9G
R5311	B C 9G
R5312	B C 10H
R5313	B C 10G
R5314	B C 9B
R5315	A D 9E
R5316	B C 11F
R5317	B C 11F
R5320	A D 10G
R5321	B C 10G
R5322	B C 10G
R5323	A D 10F
R5324	A D 8F
R5325	A D 5A
R5326	A D 6B
R5327	A D 7B
R5328	A D 8B
R5329	A D 8A
R5330	A D 9A
R5331	B C 9B
R5332	A D 10F
R5333	B C 10E
R5334	B C 10E
R5335	B C 9B
OTHER	
CP5301	A D 5B
F5001	A D 4F
FC5001	A D 2F
FC5002	A D 4F
LF5002	A D 5G
PC5101	A D 4A
SG5001	B C 1F
T5001	A D 3C
VA5001	A D 3G
VA5003	A D 1F

■ JUNCTION CIRCUIT BOARD

<92> JUNCTION
LPB10251-001D

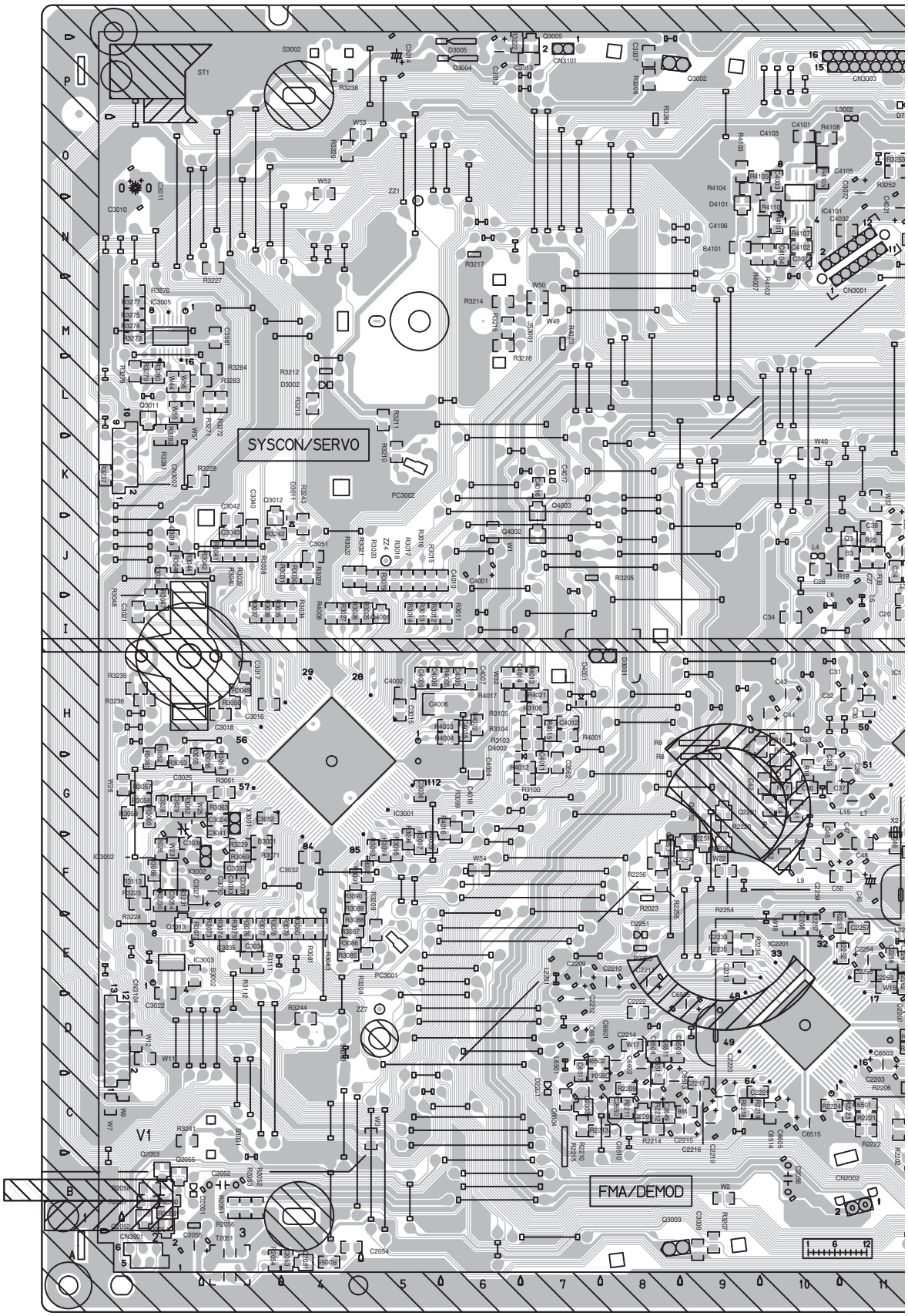


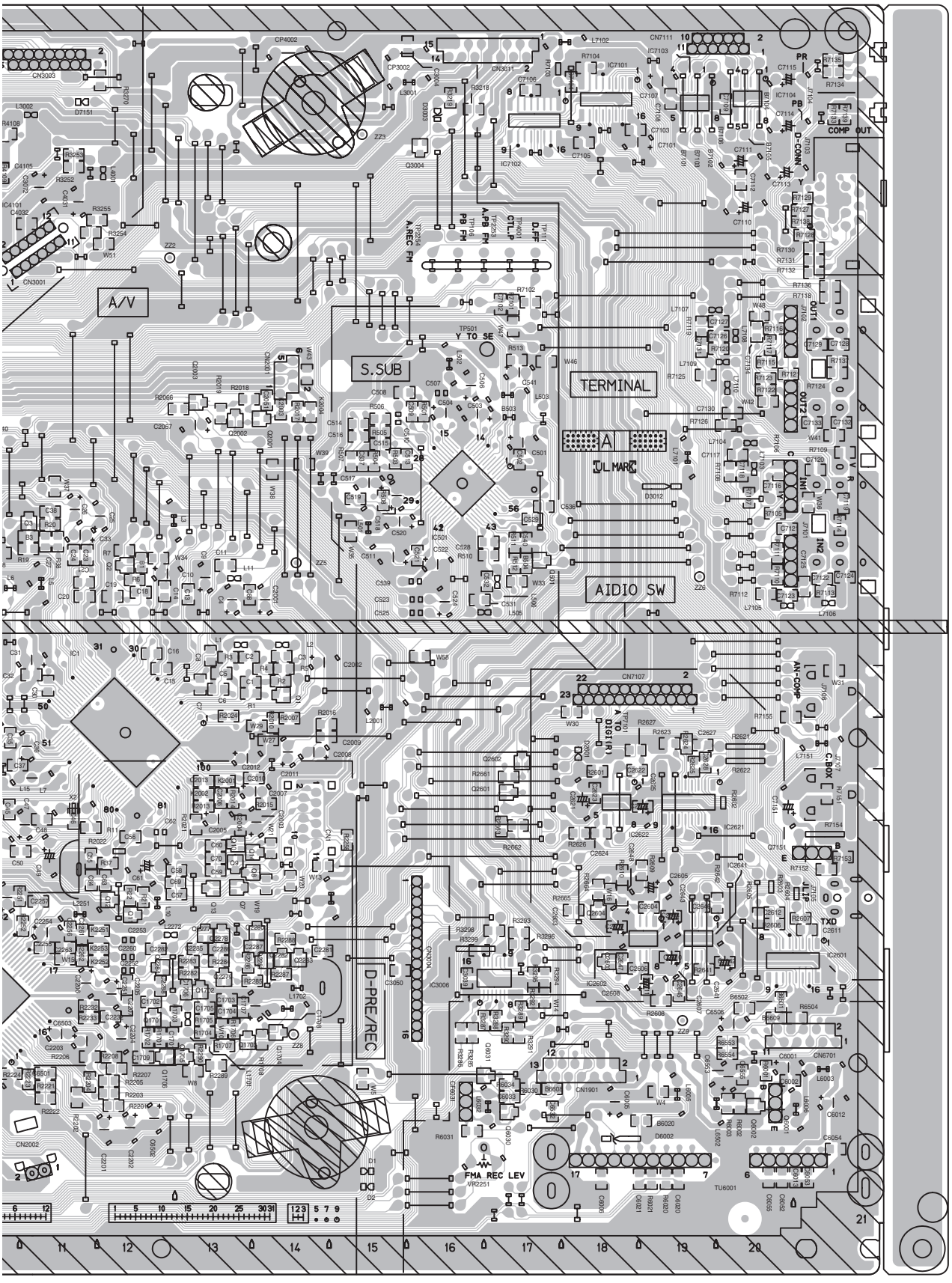
COMPONENT PARTS LOCATION GUIDE <JUNCTION> LPB10251-001D

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		C5510	A D 8E	C5520	A D 2H	C5530	B C 2D	CN5504	A D 7F	IC5503	A D 3G	L5507	A D 6E	R5502	B C 3E		
C5501	B C 3E	C5511	B C 8E	C5521	A D 2F	C5531	B C 7C	CN5505	A D 12G	IC5504	B C 3G	L5508	A D 8E	R5503	B C 2E	**OTHER**	
C5502	A D 3E	C5512	A D 3H	C5522	A D 5D	C5532	B C 7D	CN5506	A D 2F					R5504	B C 2E	CP5501	A D 7D
C5503	B C 3D	C5513	B C 4G	C5523	A D 3D	C5533	B C 8D			**COIL**		**TRANSISTOR**		R5505	B C 7D	CP5502	A D 3F
C5504	A D 2E	C5514	A D 5H	C5524	A D 7H	C5534	B C 4G	**DIODE**		L5501	A D 3H	Q5501	B C 4G	R5506	B C 7D	PC015	B C 1A
C5505	B C 3D	C5515	B C 3G	C5525	A D 6E			D5501	A D 6H	L5502	A D 8C	Q5502	B C 2G	R5507	B C 8D		
C5506	A D 7C	C5516	B C 4G	C5526	A D 7E	**CONNECTOR**				L5503	A D 3F	Q5503	A D 1F	R5508	B C 8D		
C5507	B C 7D	C5517	A D 3F	C5527	B C 4H	CN5501	A D 1H	**IC**		L5504	A D 4D			R5509	A D 2F		
C5508	A D 6D	C5518	A D 4F	C5528	B C 3F	CN5502	A D 5C	IC5501	A D 4E	L5505	A D 2D	**RESISTOR**		R5510	B C 2H		
C5509	B C 7D	C5519	A D 8D	C5529	B C 3D	CN5503	A D 4C	IC5502	A D 6D	L5506	A D 7G	R5501	B C 3E	R5511	B C 4G		

■ MAIN CIRCUIT BOARD

<03>MAIN
LPB10253-001D




A/V
S.SUB
TERMINAL
AIDIO SW
D-PRE/REC
FMA_REC_LEV
VR2251
CN3003
CN3001
CN2002
CN7107
CN7111
CN6701
CN1901
CN3004
TU6001
IC7101
IC7102
IC7103
IC7104
IC501
IC2601
IC2602
IC2621
IC3006
Q3004
Q2601
Q2602
Q6030
Q6031
Q6032
Q7151
D3012
D6002
D2
D1
COMP OUT
PR
PB
Y
AN-COMP
C-BOX
TXD
OUT1
OUT2
IN1
IN2
TP501
Y TO SE
A TO D(R)
A.REC FM
A.PB FM
FB FM
CTL_P
D.FF
UL MARK

COMPONENT PARTS LOCATION GUIDE <MAIN> LPB10253-001D

REF.NO.	LOCATION
CAPACITOR	
C1	B C 13H
C2	B C 13H
C3	B C 14H
C4	A D 13I
C5	B C 13H
C6	B C 13H
C7	B C 13H
C8	B C 13H
C9	A D 13I
C10	A D 12J
C11	B C 13J
C13	B C 13I
C14	B C 12I
C15	B C 12H
C16	B C 12I
C18	B C 12I
C19	B C 12I
C20	B C 11I
C21	B C 11I
C23	B C 11J
C24	B C 11J
C25	A D 12J
C26	A D 11J
C27	B C 11J
C28	B C 10J
C30	B C 11H
C31	A D 11H
C32	B C 11H
C33	A D 11J
C34	B C 10I
C35	B C 10G
C36	A D 11G
C37	B C 10G
C38	B C 11J
C39	A D 10H
C40	B C 10G
C41	B C 10G
C42	B C 10G
C43	A D 10H
C44	A D 10H
C45	B C 10G
C46	B C 11F
C47	A D 11F
C48	B C 11F
C49	A D 11F
C50	B C 11F
C52	B C 10F
C55	B C 11F
C56	B C 12F
C57	B C 13E
C58	B C 13F
C59	B C 13F
C60	B C 13F
C61	A D 12F
C62	A D 12F
C63	B C 12F
C64	B C 11F
C68	B C 13I
C69	B C 13F
C70	B C 13F
C501	A D 17K
C502	B C 17K
C503	A D 17L
C504	A D 16L
C506	A D 16L
C507	A D 16L
C508	B C 15L
C509	B C 16L
C510	A D 15L
C511	A D 15J
C513	B C 16K
C514	B C 15K
C515	B C 15K
C516	B C 15K
C517	A D 15K
C518	A D 15J
C519	B C 15K
C520	A D 15J
C521	B C 16J
C522	A D 16J
C523	A D 16I
C524	A D 16I
C525	A D 15I
C528	B C 17J
C529	B C 17J
C531	B C 16I
C532	B C 17I
C536	B C 17J
C537	B C 15K
C539	A D 16I
C540	B C 17J
C541	A D 17L
C1701	B C 12D
C1702	B C 12D
C1703	B C 13D
C1704	B C 13D
C1705	B C 13D
C1706	B C 13D
C1707	B C 13D
C1708	A D 14D
C1709	B C 12C
C2001	A D 14I
C2002	A D 14H
C2003	A D 14F
C2004	B C 13F
C2005	A D 13F
C2006	B C 13G
C2007	A D 13G
C2008	A D 14G
C2009	B C 14G
C2010	B C 14G
C2011	A D 14G
C2012	A D 13G
C2013	B C 13G
C2051	B C 14L
C2052	A D 3B
C2053	B C 4A
C2054	B C 4A
C2055	A D 2A
C2056	A D 10B
C2057	A D 13K
C2201	A D 12B
C2202	A D 12B
C2203	A D 11D
C2204	A D 12D
C2205	A D 12D
C2206	A D 11D
C2207	B C 12D
C2208	B C 10E
C2209	A D 7E
C2210	A D 8E
C2211	A D 8E
C2212	A D 7E
C2213	B C 9E
C2214	A D 8C
C2215	A D 9C
C2216	A D 9C
C2217	B C 9C
C2219	A D 9C
C2220	A D 9C
C2221	B C 9C
C2222	B C 8D
C2232	B C 12D
C2233	B C 9E
C2251	B C 12D
C2252	A D 12D
C2253	A D 12E
C2254	A D 11E
C2255	B C 11E
C2256	B C 11E
C2257	B C 11E
C2259	A D 10E
C2260	A D 12E
C2261	B C 11E
C2262	B C 11E
C2263	B C 11E
C2281	B C 14E
C2282	B C 12E
C2285	B C 13E
C2286	B C 13E
C2287	B C 14E
C2288	B C 12D
C2603	A D 18E
C2604	B C 19E
C2605	A D 19F
C2606	B C 18D
C2607	A D 19D
C2608	A D 18D
C2609	B C 18E
C2610	B C 19E
C2611	B C 21E
C2612	B C 20E
C2621	A D 18F
C2622	B C 18G
C2623	B C 18G
C2624	B C 18F
C2625	A D 19F
C2626	B C 19G
C2627	B C 19G
C2628	B C 19G
C2641	A D 20D
C2642	B C 20E
C2643	A D 19E
C2644	B C 19E
C2645	B C 19D
C2646	B C 19E
C2647	B C 18E
C2648	B C 18E
C2649	B C 8C
C2650	B C 8C
C3004	B C 16P
C3007	B C 8P
C3008	B C 9A
C3010	A D 2O
C3011	A D 2O
C3012	A D 6P
C3013	B C 7P
C3014	A D 5P
C3015	B C 5H
C3016	B C 3H
C3017	B C 3I
C3018	B C 3H
C3019	B C 2J
C3020	B C 2J
C3021	B C 2I
C3022	B C 2E
C3024	B C 3G
C3025	A D 2G
C3026	B C 2F
C3027	B C 2F
C3028	B C 2G
C3029	B C 2G
C3030	A D 3F
C3031	B C 3F
C3032	B C 4F
C3033	B C 3F
C3034	B C 3E
C3035	B C 3E
C3036	B C 2F
C3037	B C 3F
C3038	B C 5G
C3039	B C 16D
C3040	B C 3J
C3041	B C 3G
C3042	B C 3J
C3043	B C 3J
C3050	B C 15D
C3051	B C 4J
C3052	B C 3G
C3054	B C 2F
C3071	B C 10N
C3072	A D 11O
C3561	B C 3M
C3562	B C 7G
C4001	A D 6J
C4002	B C 5H
C4003	B C 10O
C4004	B C 6G
C4005	B C 6H
C4006	B C 5H
C4007	B C 6H
C4008	B C 5H
C4009	B C 5H
C4010	B C 6J
C4011	B C 7G
C4012	B C 7H
C4014	B C 6H
C4015	B C 6H
C4016	B C 7K
C4017	A D 7K
C4018	B C 6G
C4031	A D 11N
C4032	B C 11N
C4101	B C 10O
C4102	B C 10N
C4103	B C 10O
C4104	B C 10N
C4105	B C 10O
C4106	B C 9N
C6001	A D 20C
C6002	B C 20C
C6005	A D 18C
C6006	B C 18B
C6012	A D 21C
C6013	B C 21B
C6020	B C 19B
C6021	B C 19B
C6033	B C 17C
C6052	B C 20B
C6053	B C 21B
C6054	B C 21B
C6055	B C 20B
C6501	B C 11C
C6502	A D 12C
C6503	A D 11D
C6504	B C 7C
C6505	A D 9D
C6506	A D 20D
C6508	B C 8D
C6509	B C 8D
C6510	A D 7C
C6511	B C 8D
C6512	B C 8C
C6513	A D 8C
C6514	B C 10C
C6515	A D 10C
C6516	A D 7D
C6517	B C 7D
C6532	B C 17C
C6553	A D 20C
C6555	B C 20C
C6601	A D 8D
C6602	A D 8C
C6604	B C 7C
C6605	A D 10C
C7101	A D 19O
C7102	B C 17M
C7103	B C 18O
C7104	B C 18P
C7105	B C 18O
C7106	B C 17P
C7107	A D 19P
C7108	B C 19P
C7109	B C 20P
C7110	A D 20N
C7111	A D 20O
C7112	B C 20O
C7113	A D 20O
C7114	A D 20O
C7115	A D 20P
C7116	B C 20K
C7117	B C 20K
C7118	B C 20K
C7119	B C 21J
C7120	B C 21K
C7121	B C 20J
C7122	B C 21I
C7123	B C 20I
C7124	B C 21J
C7125	B C 21I
C7126	B C 20M
C7127	B C 20M
C7128	B C 21M
C7129	B C 21M
C7130	B C 20L
C7131	B C 19L
C7132	B C 21L
C7133	B C 21L
C7134	B C 20M
C7151	A D 20F
CONNECTOR	
CN1901	A D 18C
CN2001	A D 14L
CN2002	A D 11B
CN3001	A D 11N
CN3002	A D 1K
CN3003	A D 11P
CN3004	A D 16F
CN3011	A D 17P
CN3101	A D 7P
CN3104	A D 1C
CN3901	A D 2A
CN6701	A D 21D
CN7107	A D 19H
CN7111	A D 20P
DIODE	
D1	A D 15B
D2	A D 15B
D2001	A D 2B
D2201	A D 7C
D2251	A D 8E
D2601	A D 18G
D3001	A D 8I
D3002	A D 4L
D3003	A D 16P
D3004	A D 6P
D3005	A D 6P
D3011	B C 4J
D3012	A D 18K
D4001	B C 7H
D4002	B C 7G
D4101	B C 9N
D6002	A D 19B
D7151	A D 11P
IC	
IC1	B C 12H
IC501	B C 16K
IC2201	B C 10D
IC2601	B C 20E
IC2602	B C 19E
IC2621	B C 19G
IC2622	B C 18G
IC2641	B C 19E
IC3001	B C 4G
IC3002	B C 2F
IC3003	B C 2E
IC3005	B C 2M
IC3006	B C 17D
IC4101	B C 10O
IC7101	B C 18P
IC7102	B C 17O
IC7103	B C 19P
IC7104	B C 20P
COIL	
L1	A D 14I
L2	A D 14I
L3	A D 12J
L4	A D 10J
L5	A D 11I
L6	A D 10I
L7	A D 11G
L9	A D 10F
L10	A D 12E
L11	A D 13I
L15	A D 10G
L501	A D 15J
L502	A D 16L
L503	A D 17L
L505	A D 17I
L506	A D 17I
L1701	A D 13D
L1702	A D 14D
L2001	A D 15H
L2201	A D 7E
L2251	A D 11E
L2272	A D 12E
L2281	A D 15E
L3001	A D 16P
L3002	A D 11O
L4001	A D 12O
L6003	A D 21C
L6005	A D 19C
L6006	A D 21B
L6032	A D 17C
L6501	A D 7D
L6502	A D 20C
L7101	A D 19K
L7102	A D 18P
L7103	A D 20K
L7104	A D 20K
L7105	A D 20I
L7106	A D 21I
L7107	A D 19M
L7108	A D 20L
L7109	A D 19L
L7110	A D 20L
L7151	A D 21G
TRANSISTOR	
Q1	B C 14H
Q2	B C 12J
Q3	B C 11J
Q4	B C 10G
Q7	B C 13F
Q8	B C 13F
Q9	B C 13F
Q10	B C 13F
Q11	B C 12E
Q12	B C 12E
Q13	B C 13E
Q14	B C 14F
Q501	B C 17J
Q1701	B C 12D
Q1702	B C 13D
Q1703	B C 13D
Q1704	B C 14D
Q1705	B C 13C
Q1706	B C 12C
Q2001	B C 14L
Q2002	B C 13L
Q2003	B C 13L
Q2051	B C 4A
Q2052	B C 2B
Q2053	B C 2B
Q2054	B C 2B
Q2055	B C 2B
Q2201	B C 9G
Q2202	B C 9F
Q2203	B C 7C
Q2204	B C 8C
Q2251	B C 9F
Q2252	B C 9F
Q2253	B C 8F
Q2254	B C 9F
Q2277	B C 13E
Q2278	B C 13E
Q2279	B C 13D
Q2280	B C 14E
Q2281	B C 14E
Q2282	B C 14E
Q2283	B C 14E
Q2284	B C 12D
Q2601	B C 17G
Q2602	B C 17G
Q2603	B C 18E
Q2604	B C 18E
Q3002	A D 8P
Q3003	A D 8B
Q3004	B C 16O
Q3005	B C 7P
Q3011	B C 2L
Q3012	B C 3J
Q3013	B C 2E
Q4001	B C 5I
Q4002	B C 7J
Q4003	B C 7K
Q6001	A D 20C
Q6002	B C 20C
Q6030	B C 17C
Q6031	B C 17C
Q7151	A D 21F
RESISTOR	
R1	B C 13H
R2	B C 14H
R3	B C 13H
R4	B C 14H
R5	B C 14H
R6	B C 12I
R7	B C 12J
R8	A D 9G
R9	A D 9H
R11	B C 11F
R12	B C 10H
R14	B C 10G
R15	B C 10G
R16	B C 10H
R17	B C 10G
R18	B C 10G
R19	B C 11J
R20	B C 11J
R21	B C 12E
R22	B C 12E
R27	B C 10F
R37	B C 12F
R38	B C 11J
R501	B C 16L
R503	B C 15K
R504	B C 15K
R505	B C 15K
R506	B C 15L
R507	B C 15K
R508	B C 15K
R510	B C 17J
R511	B C 17J
R512	B C 17J
R513	B C 17L
R1701	B C 12D
R1702	B C 12D
R1703	B C 13D
R1704	B C 13D
R1705	B C 13D
R1706	B C 13D
R1707	B C 13C
R1708	B C 14D
R2007	B C 14H
R2010	B C 14H
R2013	B C 13G
R2014	B C 13G
R2015	B C 14G
R2016	B C 14H
R2017	B C 14L
R2018	B C 13L
R2019	B C 13L
R2021	B C 13F
R2022	A D 12F
R2023	A D 8F
R2024	B C 13H
R2051	B C 3B
R2052	B C 3B
R2053	B C 3B
R2054	B C 3A
R2055	B C 4A
R2056	A D 2B
R2057	B C 2B
R2058	B C 2B
R2059	B C 2B
R2060	B C 2B
R2066	B C 13L
R2201	B C 12C
R2202	B C 11C
R2203	B C 12C
R2204	B C 11C
R2205	B C 12C
R2206	B C 11C
R2207	B C 12C
R2208	B C 12C
R2209	B C 8C
R2210	B C 7C
R2211	B C 8C
R2212	B C 8C
R2213	B C 7C
R2214	B C 8C
R2215	A D 7B
R2218	B C 9C
R2219	B C 9C
R2220	B C 9G
R2221	B C 11C
R2222	B C 11C
R2223	B C 11C
R2224	B C 10C
R2232	B C 11D
R2233	B C 11D
R2234	B C 9E
R2235	B C 9E
R2251	B C 11E
R2252	B C 11E
R2253	A D 8E
R2254	B C 9F
R2255	B C 8F
R2256	B C 8F
R2257	B C 10E
R2258	B C 15F
R2282	B C 13D
R2283	B C 13E
R2284	B C 13E
R2285	B C 14D
R2286	B C 13E
R2287	B C 14D
R2288	B C 14E
R2289	B C 13C
R2290	B C 13C
R2601	B C 18G
R2602	A D 20F
R2603	A D 20F
R2604	A D 21E
R2605	B C 20E
R2606	B C 20E
R2607	B C 21E
R2608	B C 19D
R2609	B C 19F
R2610	B C 18F
R2611	B C 19D
R2621	A D 20G
R2622	A D 20G
R2623	B C 19G
R2624	B C 19G
R2625	B C 19G
R2626	B C 18F
R2627	B C 18G
R2641	B C 19D
R2642	B C 20E
R2661	B C 17G
R2662	B C 17F
R2663	B C 17F
R2664	B C 18E
R2665	B C 18E
R3011	B C 6I
R3012	B C 5I
R3013	B C 5I
R3014	B C 5I
R3015	B C 5J
R3016	B C 5J
R3017	B C 5J
R3018	B C 5J
R3019	B C 5J
R3020	B C 5J
R3021	B C 4J
R3022	B C 4J
R3025	B C 5I
R3026	B C 4I
R3027	B C 4I
R3029	B C 4J
R3030	B C 4J
R3031	B C 4J
R3034	B C 4I
R3035	B C 3I
R3036	B C 3I
R3037	B C 3I
R3038	B C 3J
R3039	B C 3J
R3040	B C 3J
R3041	B C 3J
R3042	B C 3J
R3044	B C 2J
R3046	B C 2J
R3047	B C 2I
R3048	B C 2I
R3049	B C 3H
R3050	B C 3H
R3051	B C 2G
R3052	B C 2G
R3053	B C 2G
R3054	B C 3G
R3055	B C 2G
R3056	B C 3G
R3057	B C 2G
R3058	B C 2G
R3059	B C 2G
R3060	B C 2G
R3061	B C 3G
R3062	B C 2G
R3063	B C 3G
R3066	B C 2F
R3069	B C 3F
R3071	B C 3F
R3072	B C 2E
R3073	B C 3E
R3074	B C 3E
R3075	B C 3E
R3076	B C 3E
R3077	B C 3E
R3078	B C 3E
R3079	B C 4E
R3080	B C 4E
R3081	B C 4E
R3083	B C 4E
R3085	B C 4E
R3086	B C 4E
R3087	B C 4E
R3088	B C 4E
R3089	B C 4F
R3090	B C 4F
R3091	B C 4F
R3092	B C 5F
R3093	B C 5F
R3094	B C 5F
R3095	B C 5F
R3096	B C 5F
R3097	B C 5F
R3099	B C 6G
R3100	B C 7G
R3103	B C 7H
R3104	B C 7H
R3105	B C 7H
R3106	B C 7H
R3111	B C 3E
R3112	B C 3E
R3113	B C 2F
R3205	A D 7J
R3206	B C 8P
R3207	B C 9A
R3208	B C 5E
R3209	B C 5E
R3210	B C 5K
R3211	B C 5L
R3212	A D 4L
R3213	B C 4L
R3214	B C 6M
R3215	B C 6M
R3216	B C 6M
R3217	A D 6N
R3218	B C 16P
R3219	B C 16P
R3220	B C 4O
R3222	B C 6P
R3223	B C 2F
R3224	B C 2F
R3227	B C 3N
R3228	B C 2K
R3229	B C 3F
R3230	B C 2F
R3231	B C 2F
R3235	B C 2H
R3236	B C 2H
R3237	B C 1K
R3238	B C 4P
R3241	B C 2C
R3242	B C 3J
R3243	B C 4J
R3244	B C 4D
R3252	B C 11O
R3253	B C 11O
R3254	B C 11N
R3255	B C 12N
R3264	A D 8O
R3270	B C 12P
R3271	B C 3L
R3272	B C 3L
R3273	B C 2M
R3274	B C 2M
R3275	B C 2M
R3276	B C 2M
R3277	B C 2M
R3278	B C 2L
R3279	B C 2L
R3280	B C 2L
R3281	B C 2L
R3282	B C 2L
R3283	B C 2L
R3284	B C 3L
R3285	B C 16D
R3286	B C 16D
R3287	B C 17D
R3288	B C 17D
R3289	B C 17D
R3290	B C 17D
R3291	B C 17D
R3292	B C 17D
R3293	B C 17E
R3294	B C 17D
R3295	B C 17D
R3296	B C 17E
R3297	A D 17E
R3298	B C 17E
R3299	B C 16E
R4003	B C 6H
R4004	B C 6H
R4005	B C 6H
R4007	B C 9N
R4008	B C 4I
R4009	B C 5F
R4012	B C 7G
R4013	B C 7H
R4015	B C 7H
R4016	B C 6G
R4017	B C 6H
R4020	A D 7M
R4021	B C 7H
R4022	B C 6H
R4101	B C 10N
R4102	B C 10N
R4103	B C 9O
R4104	B C 9O
R4105	B C 9O
R4107	B C 10N
R4108	B C 10O
R4109	B C 10O
R4110	B C 10N
R6001	B C 20C
R6002	B C 20C
R6003	B C 20C
R6020	B C 19B
R6021	B C 19B
R6030	B C 17C
R6031	B C 16B
R6034	B C 17C
R6502	B C 7D
R6504	B C 21D
R6553	B C 20D
R6554	B C 20C
R7101	B C 17M
R7102	B C 17M
R7103	A D 17P
R7104	B C 18P
R7105	B C 20J
R7106	B C 20K
R7107	B C 20K
R7108	B C 20K
R7109	B C 21K
R7110	B C 20J
R7111	B C 20J
R7112	B C 20I
R7113	B C 21I
R7114	B C 21J
R7115	B C 20L
R7116	B C 20M
R7117	B C 20M
R7118	B C 21M
R7119	B C 19M
R7120	B C 20L
R7121	B C 20L
R7122	B C 20L
R7123	B C 20L
R7124	B C 21L
R7125	B C 19L
R7126	B C 20K
R7127	B C 21N
R7128	B C 21N
R7129	B C 21N
R7130	B C 21N
R7131	B C 21N
R7132	B C 21M
R7133	B C 21O
R7134	B C 21P
R7135	B C 21P
R7136	B C 21M
R7137	B C 21L
R7138	B C 21N
R7139	B C 21O
R7151	B C 21G
R7152	B C 21F
R7153	B C 21F
R7154	A D 21F
R7155	B C 20H
OTHER	
CF6031	A D 16C
CM1	B C 20A
CM2	B C 1P
CN1	A D 14F
CP3002	A D 15P
CP4002	A D 14P
J7101	A D 22J
J7102	A D 22L
J7103	A D 22N
J7104	A D 22P
J7105	A D 22E
J7106	A D 22H
J7107	A D 22G
JS3001	A D 6M
K2001	B C 13G
K2002	B C 13G
K2003	B C 14L
K2004	B C 14L
K2251	B C 12E
K2252	B C 12E
K2253	B C 12E
PC3001	A D 5E
PC3002	A D 5K
S3001	A D 3C
S3002	A D 4P
S3003	A D 4D
T2051	A D 3A
TP106	A D 16M
TP111	A D 17M
TP501	A D 17L
TP2253	A D 17M
TP2254	A D 16N
TP4001	A D 17M
TP7101	A D 18H
TU6001	A D 21B
VR2251	A D 17B
X2	A D 11G
X3001	A D 3G
X3002	A D 3F

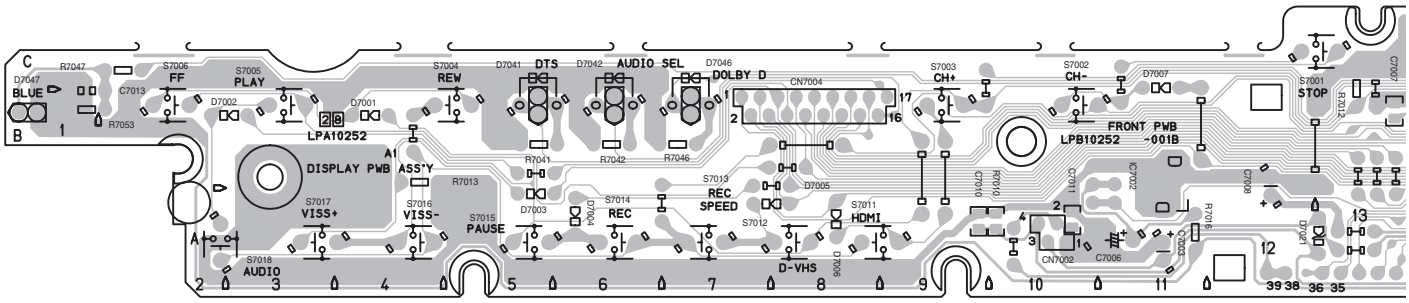
■ CPU PIN FUNCTION

<SYSCON IC3001>

PIN NO.	LABEL	IN/OUT	FUNCTION
1	CTL[+]	IN/OUT	CTL(+) SIGNAL
2	SVss	-	GND
3	CTL[-]	IN/OUT	CTL(-) SIGNAL
4	CTLBIAS	-	CTL BIAS VOLTAGE
5	CTLFB	IN	CTL PULSE FEEDBACK
6	CTLAMPOUT	OUT	CTL PULSE OUTPUT
7	CTLSMTIN	IN	CTL PULSE OUTPUT
8	CFG	IN	CAPSTAN FG PULSE INPUT
9	SVcc	-	SYSTEM POWER
10	Avcc	-	SYSTEM POWER
11	LED[DEMOD]	IN	DETECT THE MTS MODE
12	AFC	IN	TUNING CHECK
13	LSA	IN	MECHANISM MODE DETECT(A)
14	START_SENSOR	IN	START SENSOR
15	END_SENSOR	IN	END SENSOR
16	LSB	IN	MECHANISM MODE DETECT(B)
17	LSC	IN	MECHANISM MODE DETECT(C)
18	A.ENV/ND[L]	IN	AUDIO PB FM ENV. INPUT/NON HiFi MODEL:L
19	HS2_ENV	IN	AT DETECTION
20	VIDEO_ENV	IN	AUTO TRACKING DETECT/INPUT THE AVERAGE OF PLAYBACK VIDEO SIGNAL
21	D/HS1_ENV	IN	PB FM INPUT / AT DETECTION
22	WIDE_DET	IN	WIDE ASPECT DETECTION
23	Avss	-	GND
24	CTL_GAIN	OUT	CONTROL AMP OUT FREQUENCY RESPONSE SWITCHIN
25	NOR/S	IN	S.VHS MODE:H (NORMAL MODE:L)
26	VSEL_A	OUT	VIDEO SIGNAL INPUT SELECT-A
27	VSEL_B	OUT	VIDEO SIGNAL INPUT SELECT-B
28	CAP.M_F/R	OUT	CAPSTAN MOTOR REVERSE CONTROL (FWD:L/REV:H)
29	RC_IN	IN	REMOTE CONTROL DATA INPUT
30	PROTECT	IN	DETECTION SIGNAL FOR SWITCHING POWER SUPPLY
31	REC_SAFTY	IN	REC SAFETY SWITCH DETECT (SW ON:L)
32	PAUSE/COMPU_IN	IN	REMOTE PAUSE CONTROL/NC
33	COMPU_OUT/TEST_IN	OUT	CONTROL SIGNAL FOR TV LINK/MECHA TEST MODE
34	STB	OUT	STROBE SIGNAL
35	LM_F/R/S[LCM1]	OUT	LOADING MOTOR DRIVE CONTROL
36	LSD[LMC2]	IN	MECHANISM MODE DETECT (D)
37	S.CASS[H]	IN	S-VHS CASSETTE DETECT(S-VHS CASSETTE : H)
38	SB_GAIN[PWM]	OUT	VOLTAGE CONTROL SIGNAL FOR VIDEO FREQUENCY RESPONSE
39	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
40	D.REC_LEVEL1	OUT	LEVEL1 CONTROL SIGNAL OF D-VHS RECORDING
41	D.REC_LEVEL2	OUT	LEVEL2 CONTROL SIGNAL OF D-VHS RECORDING
42	GR_ON[H]	-	NOT USED
43	Vss	-	GND
44	RMO	OUT	REMOTE CONTROL OUTPUT FOR SATELLITE RECEIVER
45	Vcc	-	SYSTEM POWER
46	S_DATA_TOSYS	IN	SERIAL DATA TRANSFER OUTPUT FROM THE ON-SCREEN IC TO THE FDP DRIVER
47	S_DATA_FRSYS	OUT	SERIAL DATA TRANSFER OUTPUT FROM THE FDP DRIVER TO THE ON-SCREEN IC
48	S_CLK	OUT	SERIAL DATA TRANSMISSION CLOCK FROM THE FDP DRIVER TO THE ON-SCREEN IC
49	12C_DATA_A/V	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR A/V IC
50	12C_CLK_A/V	OUT	SERIAL DATA TRANSFER CLOCK FOR A/V IC
51	KBUS_DATA_IN	IN	SERIAL DATA INPUT FOR THE D-VHS HOST CPU
52	KBUS_DATA_OUT	OUT	SERIAL DATA OUTPUT FOR THE D-VHS HOST CPU
53	KBUS_CLK	OUT	SERIAL DATA TRANSMISSION CLOCK FOR THE D-VHS HOST CPU
54	SP_FG	IN	DETECTION SIGNAL FOR SUPPLY REEL ROTATION/TAPE REMAIN
55	TU_FG	IN	DETECTION SIGNAL TAKE-UP REEL ROTATION/TAPE REMAIN
56	KBUS_REQ[IN]	OUT	REQUEST OF SERIAL DATA FOR THE D-VHS HOST CPU
57	D.CASS[H]	IN	DETECTION SIGNAL FOR D-VHS CASSETTE (DERECTION:H)
58	EEP_WP	OUT	WRITE PROTECT TERMINAL FOR EEPROM
59	JSCLK	IN	CLOCK ADJUST SIGNAL
60	E2P_I2C_CLK	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
61	E2P_I2C_DATA	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
62	FWE	-	FLASH WRITE ENABLE
63	NMI	-	NOT USED
64	X2	-	TIMER CLOCK(32kHz)
65	X1	-	TIMER CLOCK(32kHz)
66	RES	-	RESET TERMINAL(RESET ON:L)
67	OSC1[IN]	IN	MAIN SYSTEM CLOCK(10MHz)
68	Vss	-	GND
69	OSC2[OUT]	IN	MAIN SYSTEM CLOCK(10MHz)
70	Vcc	-	SYSTEM POWER
71	MODE	-	NOT USED
72	SYNC_DET[L]	IN	DETECTION OF VIDEO SYNC SIGNAL (DETECTED : L)
73	TU_V.MUTE[H]	OUT	TUNER VIDEO SIGNAL MUTE : H
74	CH1_RECST[H]	OUT	REC START CONTROL FOR CH1
75	TU_12C_CLK2	OUT	SERIAL DATA TRANSFER CLOCK FOR TUNER
76	TU_12C_DATA2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR TUNER
77	AT_ON	OUT	D-VHS LS3 REC TIMING CONTROL
78	LS2_H_SEL	OUT	LS2 HEAD SELECT
79	FLY_ON[H]	OUT	FLYING ERASE HEAD REC START: H
80	LS2_FF	OUT	LS2 FF OUTPUT
81	CH2_RECST[H]	OUT	REC START CONTROL FOR CH2
82	Vcc	-	SYSTEM POWER
83	HS_RECST[H]	OUT	D-VHS HS RECORDING START
84	Vss	-	GND
85	SP_SHORT[H]	OUT	MODE SELECT
86	LP_SHORT[H]	OUT	MODE SELECT
87	H.REC_ST[H]	OUT	HiFi AUDIO SOUND RECORDING START
88	N.REC_ST[H]	OUT	NORMAL AUDIO SOUND RECORDINGSTART
89	A.MUTE[H]	OUT	AUDIO MUTE CONTROL (MUTE ON: H)
90	REF30	IN	REFERENCE SIGNAL INPUT (30HZ)
91	REF5	IN	REFERENCE SIGNAL INPUT (5HZ)
92	EXP_CLK	OUT	SERIAL DATA TRANSFER CLOCK FOR AUDIO/VIDEO AND TUNER/REG CONTROL
93	EXPDATA1	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR AUDIO/VIDEO CONTROL
94	EXPDATA2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR TUNER/REG CONTROL
95	ATSC_P_CTL1	OUT	ATSC TUNER POWER CONTROL-1
96	ATSC_P_CTL2	OUT	ATSC TUNER POWER CONTROL-2
97	P.MUTE[H]	OUT	PICTURE MUTE CONTROL (MUTE ON : H)
98	C.SYNC	IN	COMPOSITE SYNC INPUT
99	A/HS2..FF	OUT	AUDIO FF OUTPUT
100	V/STD/HS1.FF	OUT	ROTATION DETECTION SIGNAL FOR DRUM MOTOR/TIMING CONTROL SIGNAL FOR REC
101	CAPPWM	OUT	CAPSTAN MOTOR CONTROL
102	DRUMPWM	OUT	DRUM MOTOR CONTROL
103	HOST_RES	OUT	D-VHS HOST CPU RESET
104	ET_REC[H]	OUT	S-VHS ET REC MODE:H
105	SEQ_P	OUT	SEQUENCE PULSE OUTPUT
106	HS1_S_FF_REW	OUT	DETECTION OF HIGH SPEED FF/REW SIGNAL
107	NC	-	NOT USED
108	DFG	IN	DRUM FG PULSE INPUT
109	Vcc	-	SYSTEM POWER
110	V.PULSE	OUT	V.PULSE ADDITION TIMING CONTROL
111	Vss	-	GND
112	CTLREF	-	CTL REFERENCE VOLTAGE

■ SWITCH/DISPLAY,OPERATION/JACK AND JACK CIRCUIT BOARDS(HM-DH5US)

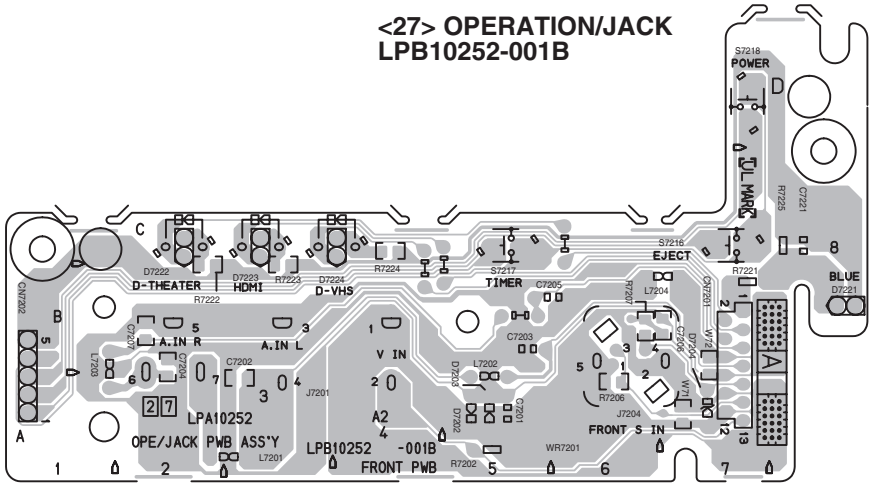
<28> SWITCH/DISPLAY
LPB10252-001B



COMPONENT PARTS LOCATION GUIDE <SWITCH/DISPLAY> LPB10252-001B

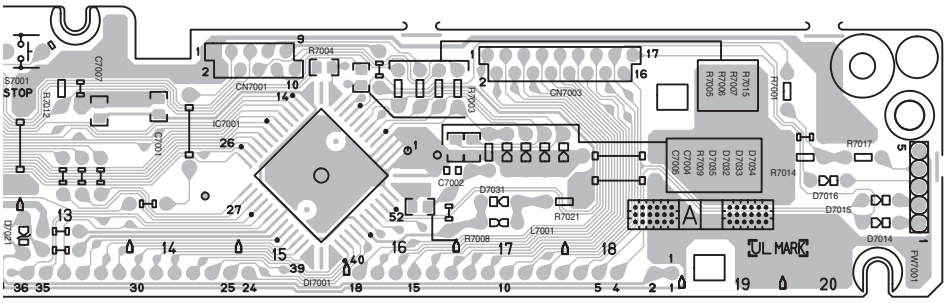
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		**CONNECTOR**		D7007	A D 11B	D7047	A D 1B	R7006	A D 16B	R7042	A D 6B	S7005	A D 3B
C7001	B C 14B	CN7001	A D 14C	D7014	A D 20A	**IC**		R7007	A D 16B	R7046	A D 7B	S7006	A D 2B
C7002	A D 17B	CN7002	A D 10A	D7015	A D 20A	IC7001	B C 15B	R7008	B C 16A	R7047	A D 2C	S7011	A D 9A
C7003	A D 11A	CN7003	A D 17C	D7016	A D 20B	IC7002	A D 11B	R7009	A D 17B	R7053	A D 1B	S7012	A D 8A
C7004	B C 17B	CN7004	A D 7B	D7021	A D 13A			R7010	B C 10A			S7013	A D 7A
C7005	B C 17B			D7031	A D 17A	**COIL**		R7012	A D 13B	**OTHER**		S7014	A D 6A
C7006	A D 11A	**DIODE**		D7032	A D 17B	L7001	A D 17A	R7013	A D 4B	CM2	B C 21P	S7015	A D 5A
C7007	B C 13B	D7001	A D 4B	D7033	A D 17B			R7014	A D 20B	DI7001	A D 15B	S7016	A D 4A
C7008	A D 12A	D7002	A D 3B	D7034	A D 18B	**RESISTOR**		R7015	A D 17B	FW7001	A D 21A	S7017	A D 3A
C7010	B C 9A	D7003	A D 6A	D7035	A D 17B	R7001	A D 20C	R7016	A D 11A	S7001	A D 13C	S7018	A D 2A
C7011	B C 10A	D7004	A D 6A	D7041	A D 5B	R7003	B C 16C	R7017	A D 20B	S7002	A D 10B		
C7013	A D 1B	D7005	A D 8A	D7042	A D 6B	R7004	B C 15C	R7021	A D 17A	S7003	A D 9B		
		D7006	A D 8A	D7046	A D 7B	R7005	A D 16B	R7041	A D 5B	S7004	A D 5B		

<27> OPERATION/JACK
LPB10252-001B

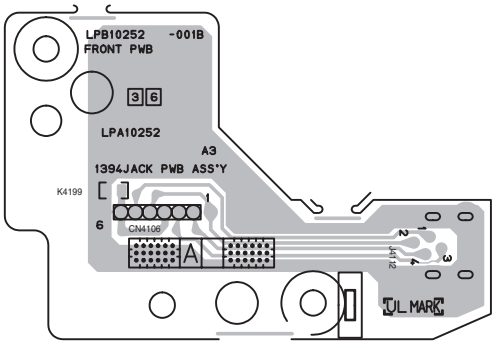


COMPONENT PARTS LOCATION GUIDE <OPERATION/JACK> LPB10252-001B

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		C7207	B C 2B	**DIODE**		D7224	A D 4C	R7222	B C 2B	J7204	A D 6B	S7218	A D 7D
C7201	A D 5A	C7221	A D 8C	D7202	A D 5A			R7223	B C 3B	L7201	A D 3A	WR7201	A D 5A
C7202	B C 3A			D7203	A D 5A	**RESISTOR**		R7224	B C 4C	L7202	A D 5A		
C7203	A D 5B	**CONNECTOR**		D7204	A D 7A	R7202	A D 5A	R7225	A D 8C	L7203	A D 1B		
C7204	B C 2B	CN7201	A D 7B	D7221	A D 8B	R7206	B C 6A			L7204	A D 7B		
C7205	A D 5B	CN7202	A D 1A	D7222	A D 2C	R7207	B C 6B	**OTHER**		S7216	A D 7C		
C7206	B C 7B			D7223	A D 3C	R7221	A D 7B	J7201	A D 3B	S7217	A D 5C		

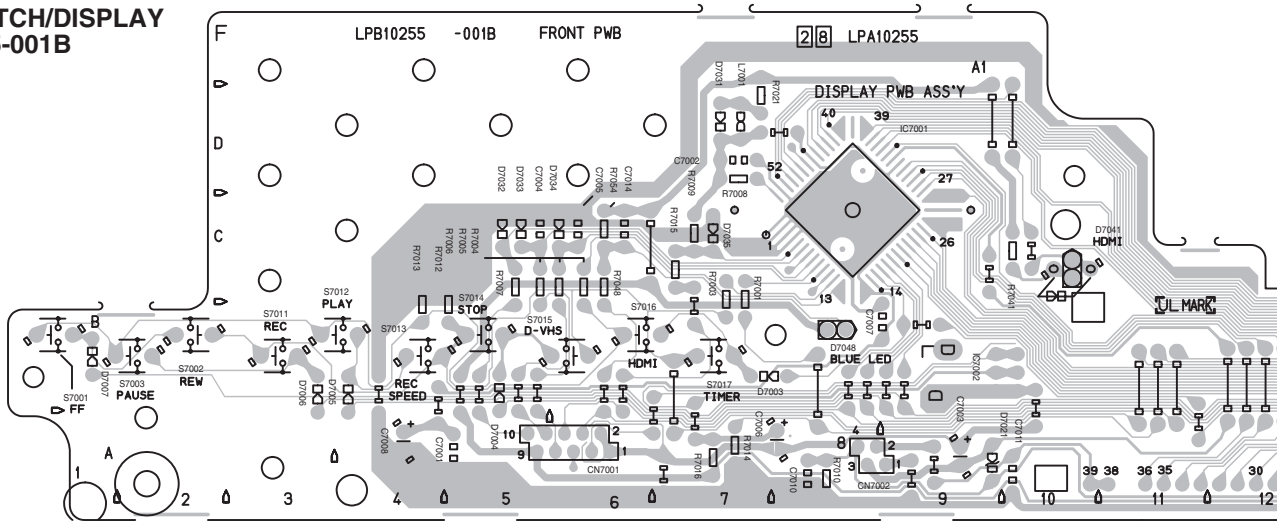


<36> JACK
LPB10252-001B



■ SWITCH/DISPLAY,OPERATION/JACK AND JACK CIRCUIT BOARDS(HM-DT100US)

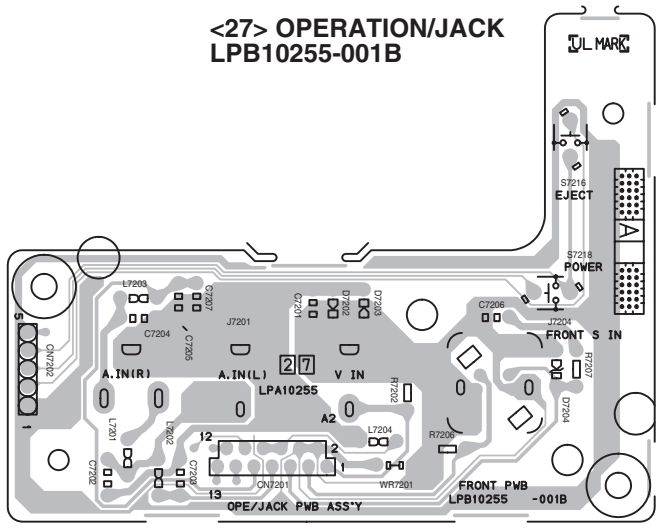
<28> SWITCH/DISPLAY
LPB10255-001B

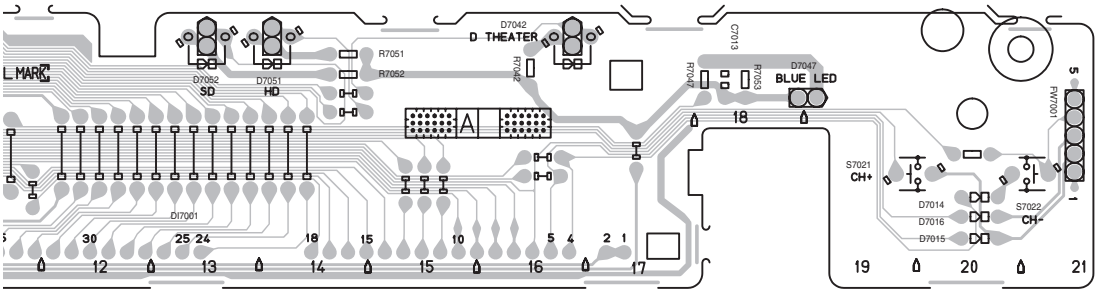


COMPONENT PARTS LOCATION GUIDE <SWITCH/DISPLAY> LPB10255-001B

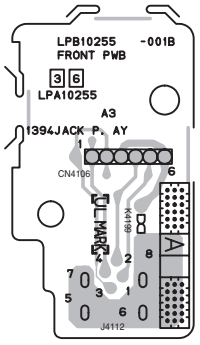
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		CN7001	A D 6A	D7033	A D 5C	**COIL**		R7014	A D 7A	FW7001	A D 21B
C7001	A D 5A	CN7002	A D 9A	D7034	A D 6C	L7001	A D 7D	R7015	A D 7C	S7001	A D 1B
C7002	A D 7D			D7035	A D 7C			R7016	A D 7A	S7002	A D 2B
C7003	A D 9A	**DIODE**		D7041	A D 10C	**RESISTOR**		R7017	A D 20B	S7003	A D 2B
C7004	A D 5C	D7003	A D 8B	D7042	A D 16C	R7001	A D 7C	R7021	A D 7D	S7011	A D 3B
C7005	A D 6C	D7004	A D 5B	D7047	A D 19B	R7003	A D 7B	R7041	A D 10C	S7012	A D 4B
C7006	A D 8A	D7005	A D 4B	D7048	A D 8B	R7004	A D 6C	R7042	A D 16B	S7013	A D 4B
C7007	A D 9C	D7006	A D 3B	D7051	A D 14C	R7005	A D 6C	R7047	A D 18B	S7014	A D 5B
C7008	A D 4A	D7007	A D 1B	D7052	A D 13C	R7006	A D 5C	R7048	A D 6C	S7015	A D 6B
C7010	A D 8A	D7014	A D 20A	DI7001	A D 14B	R7007	A D 5C	R7051	A D 14C	S7016	A D 6B
C7011	A D 10A	D7015	A D 20A			R7008	A D 7D	R7052	A D 14B	S7017	A D 7B
C7013	A D 18B	D7016	A D 20A	**IC**		R7009	A D 7C	R7053	A D 18B	S7021	A D 20B
C7014	A D 6C	D7021	A D 10A	IC7001	B C 8C	R7010	A D 8A	R7054	A D 6C	S7022	A D 21B
		D7031	A D 7D	IC7002	A D 9B	R7012	A D 5C				
CONNECTOR		D7032	A D 5C			R7013	A D 4C	**OTHER**			

<27> OPERATION/JACK
LPB10255-001B





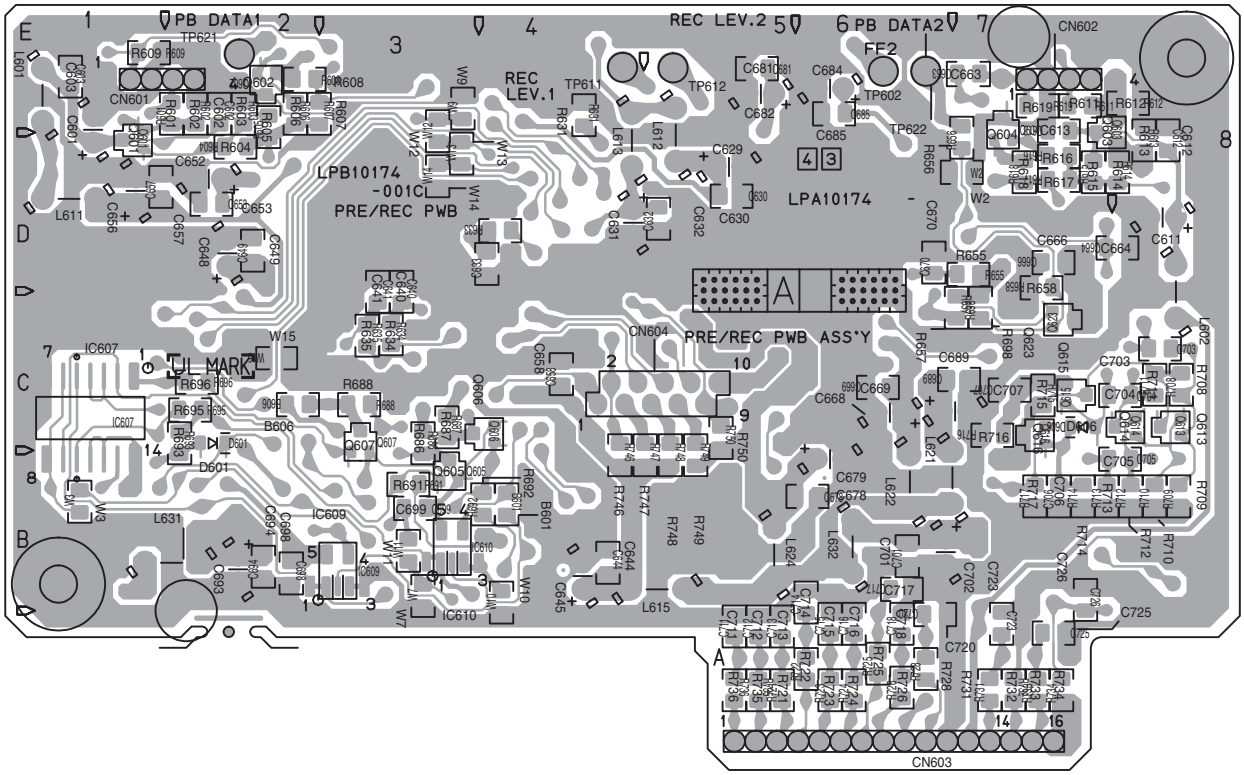
<36> JACK
LPB10255-001B



■ PRE/REC CIRCUIT BOARD

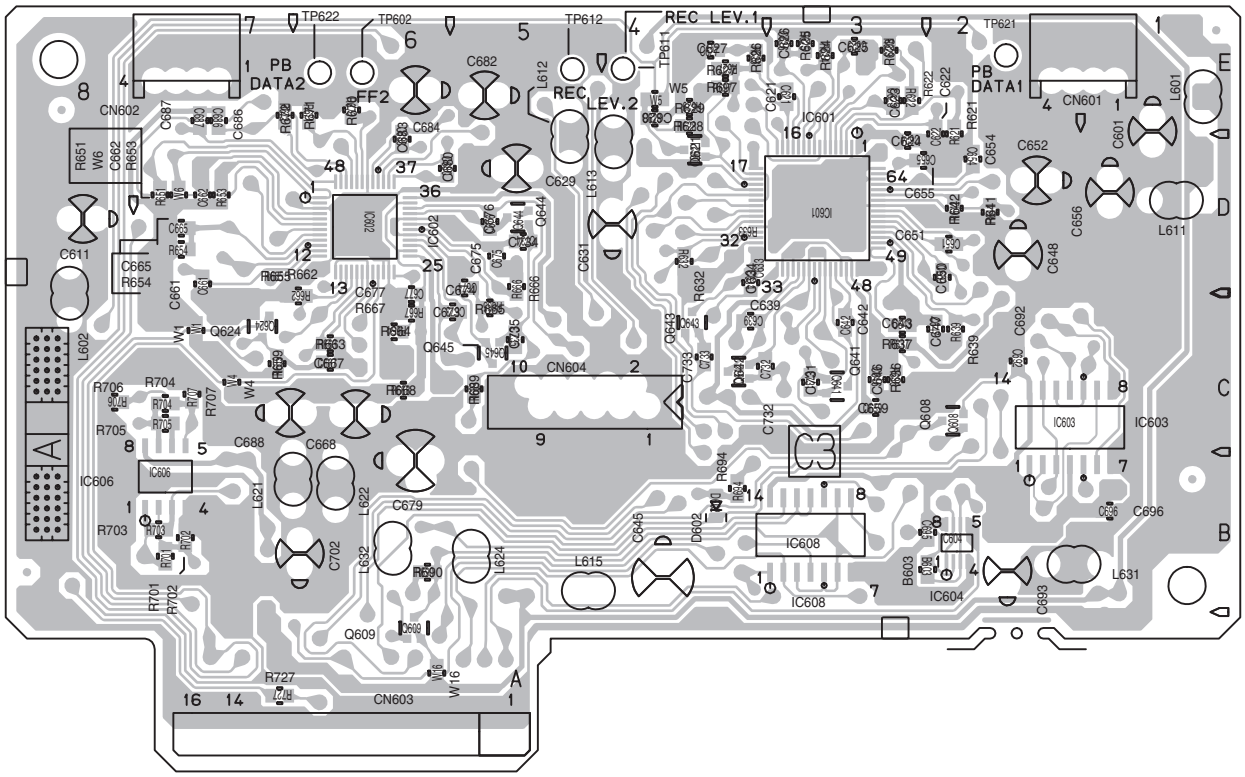
<43> PRE/REC
LPB10174-001C

-FOIL SIDE B-



<43> PRE/REC
LPB10174-001C

-COMPONENT SIDE A-



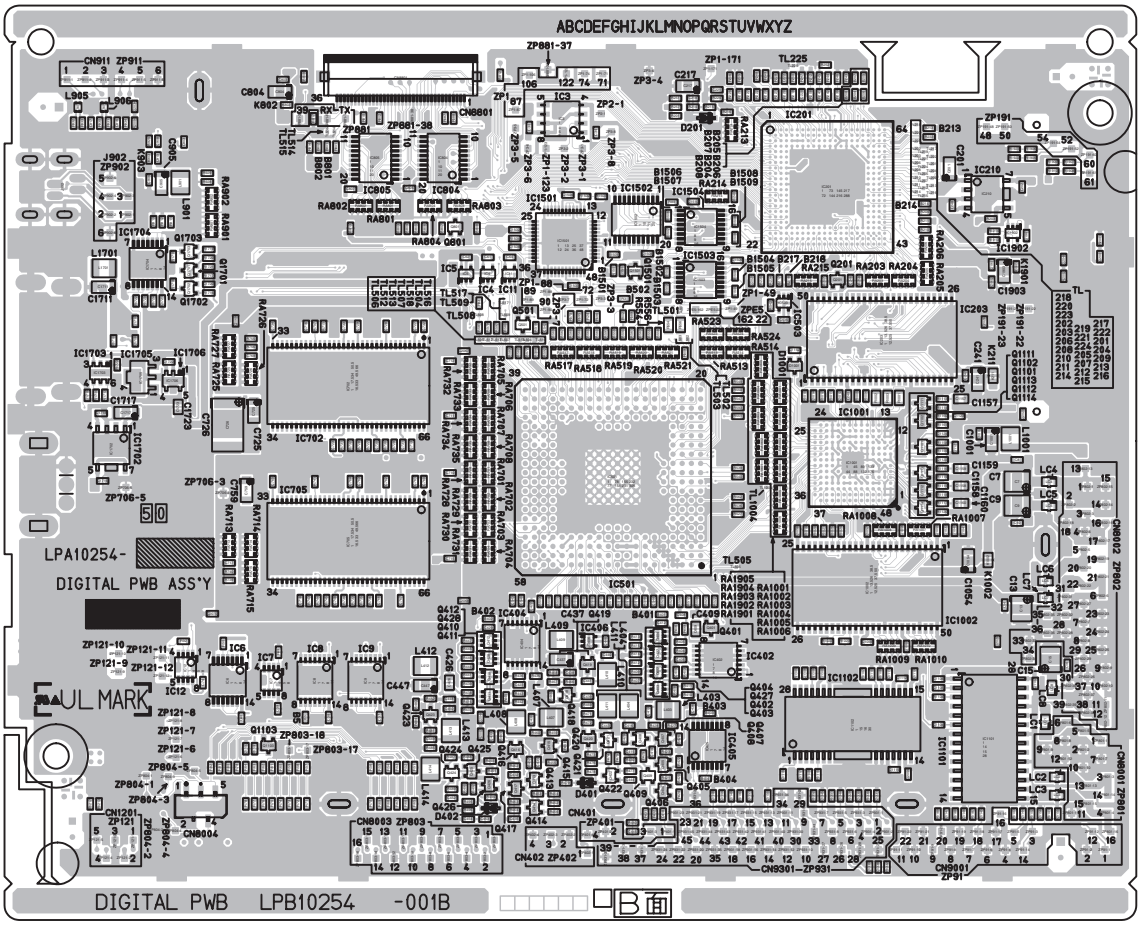
COMPONENT PARTS LOCATION GUIDE <PRE/REC> LPB10174-001C

REF.NO.	LOCATION
CAPACITOR	
C601	A D 1D
C602	B C 2E
C603	B C 1E
C611	A D 8D
C612	B C 8D
C613	B C 7D
C621	A C 3E
C622	A C 2D
C623	A C 3E
C624	A C 3D
C625	A C 3E
C626	A C 3E
C627	A C 4E
C628	A C 4D
C629	A D 5D
C630	B C 5D
C631	A D 4D
C632	B C 5D
C633	B C 4D
C634	A C 4C
C639	A C 4C
C640	B C 3C
C641	B C 3C
C642	A C 3C
C643	A C 3C
C644	B C 4B
C645	A D 4B
C646	A C 3C
C647	A C 2C
C648	A D 2D
C649	B C 2D
C650	A C 2C
C651	A C 2D
C652	A D 2D
C653	B C 2D
C654	A C 2D
C655	A C 2D
C656	A D 1D
C657	B C 1D
C658	B C 4C
C659	A C 3C
C661	A C 7C
C662	A C 7D
C663	B C 7E
C664	B C 7D
C665	A C 7D
C666	B C 7D
C667	A C 6C
C668	A D 6C
C669	B C 6C
C670	B C 6D
C673	A C 5C
C674	A C 5C
C675	A C 5D
C676	A C 5D
C677	A C 6C
C678	B C 6B
C679	A D 6B
C680	A C 5D
C681	B C 5E
C682	A D 5E
C683	A C 6D
C684	A D 6E
C685	B C 6E
C686	A C 7D
C687	A C 7D
C688	A D 6C
C689	B C 6C
C692	A C 2C
C693	A D 2B
C694	B C 2B
C695	A C 2B
C696	A C 1B
C698	B C 2B
C699	B C 3B
C701	B C 6B
C702	A D 6B
C703	B C 8C
C704	B C 7C
C705	B C 7B
C706	B C 7B
C707	B C 7C
C711	B C 5A
C712	B C 5A
C713	B C 5A
C714	B C 6A
C715	B C 6A
C716	B C 6A
C717	B C 6B
C718	B C 6A
C720	B C 6A
C723	B C 7A
C725	B C 7A
C726	B C 7A
C731	A C 3C
C732	A C 3C
C733	A C 4C
C734	A C 5D
C735	A C 5C
CONNECTOR	
CN601	A D 1E
CN602	A D 7E
CN603	A D 5A
CN604	A D 4C
DIODE	
D601	B C 2B
D602	A C 4B
D606	B C 7C
IC	
IC601	A C 3D
IC602	A C 6D
IC603	A C 2C
IC604	A C 2B
IC606	A C 7B
IC607	B C 1C
IC608	A C 3B
IC609	B C 3B
IC610	B C 3B
COIL	
L601	A D 1E
L602	A D 8D
L611	A D 1D
L612	A D 5E
L613	A D 4E
L615	A D 5B
L621	A D 6B
L622	A D 6B
L624	A D 5B
L631	A D 1B
L632	A D 6B
TRANSISTOR	
Q601	B C 1D
Q602	B C 2E
Q603	B C 7D
Q604	B C 7D
Q605	B C 3B
Q606	B C 4B
Q607	B C 3B
Q608	A C 2C
Q609	A C 6A
Q613	B C 8C
Q614	B C 8C
Q615	B C 7C
Q616	B C 7B
Q621	A C 4D
Q623	B C 7C
Q624	A C 7C
Q641	A C 3C
Q642	A C 4C
Q643	A C 4C
Q644	A C 5D
Q645	A C 5C
RESISTOR	
R601	B C 2E
R602	B C 2E
R603	B C 2E
R604	B C 2D
R605	B C 2D
R606	B C 2E
R607	B C 2E
R608	B C 2E
R609	B C 1E
R611	B C 7E
R612	B C 8E
R613	B C 8D
R614	B C 7D
R615	B C 7D
R616	B C 7D
R617	B C 7D
R618	B C 7D
R619	B C 7E
R621	A C 2D
R622	A C 3E
R623	A C 3E
R624	A C 3E
R625	A C 3E
R626	A C 4E
R627	A C 4E
R628	A C 4D
R629	A C 4E
R631	B C 4D
R632	A C 4D
R633	B C 4D
R634	B C 3C
R635	B C 3C
R636	A C 3C
R637	A C 3C
R639	A C 2C
R641	A C 2D
R642	A C 2D
R651	A C 7D
R653	A C 7D
R654	A C 7D
R655	B C 7C
R656	B C 6D
R657	B C 6C
R658	B C 7C
R659	A C 7C
R662	A C 6C
R663	A C 6C
R664	A C 6C
R665	A C 5C
R666	A C 5C
R667	A C 6C
R668	A C 6C
R670	A C 6E
R671	A C 6E
R672	A C 6E
R686	B C 3B
R687	B C 3C
R688	B C 3C
R689	A C 5C
R690	A C 6B
R691	B C 3B
R692	B C 3B
R693	B C 2B
R694	A C 4B
R695	B C 2C
R696	B C 2C
R697	A C 4E
R698	B C 7C
R701	A C 7B
R702	A C 7B
R703	A C 7B
R704	A C 7C
R705	A C 7C
R706	A C 8C
R707	A C 7C
R708	B C 8C
R709	B C 8B
R710	B C 8B
R711	B C 8C
R712	B C 8B
R713	B C 7B
R714	B C 7B
R715	B C 7C
R716	B C 7B
R717	B C 7B
R721	B C 5A
R722	B C 6A
R723	B C 6A
R724	B C 6A
R725	B C 6A
R726	B C 6A
R727	A C 7A
R728	B C 6A
R731	B C 7A
R732	B C 7A
R733	B C 7A
R734	B C 7A
R735	B C 5A
R736	B C 5A
R746	B C 4B
R747	B C 5B
R748	B C 5B
R749	B C 5B
R750	B C 5B
OTHER	
TP602	A D 6E
TP611	A D 4E
TP612	A D 5E
TP621	A D 2E
TP622	A D 6E
TP631	A C 6A
TP632	A C 6B
TP633	A C 6B

■ DIGITAL CIRCUIT BOARD(HM-DH5US)

<50> DIGITAL
LPB10254-001B

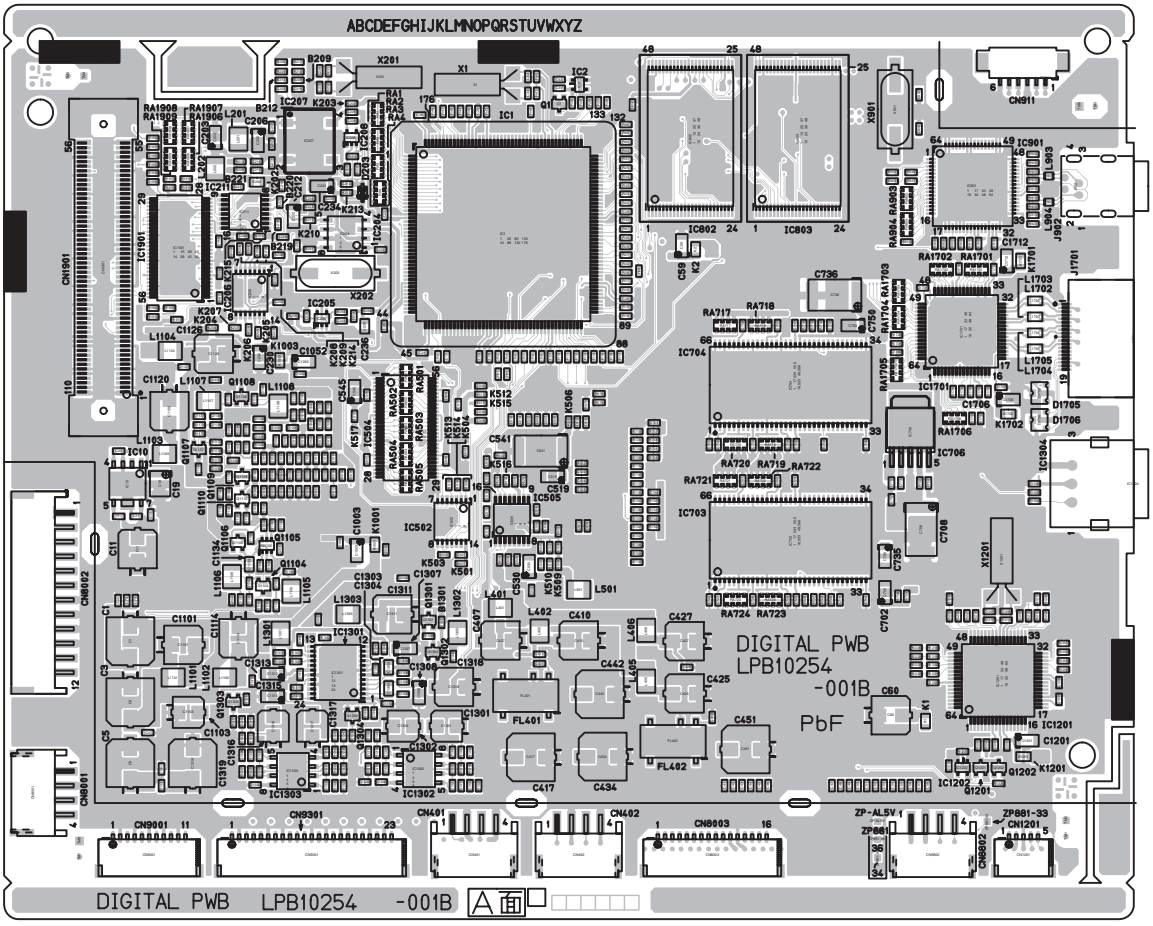
-FOIL SIDE B-



1 2 3 4 5 6 7 8 9 10

<50> DIGITAL
LPB10254-001B

-COMPONENT SIDE A-



H G F E D C B A

10 9 8 7 6 5 4 3 2 1

COMPONENT PARTS LOCATION GUIDE <DIGITAL> LPB10254-001B

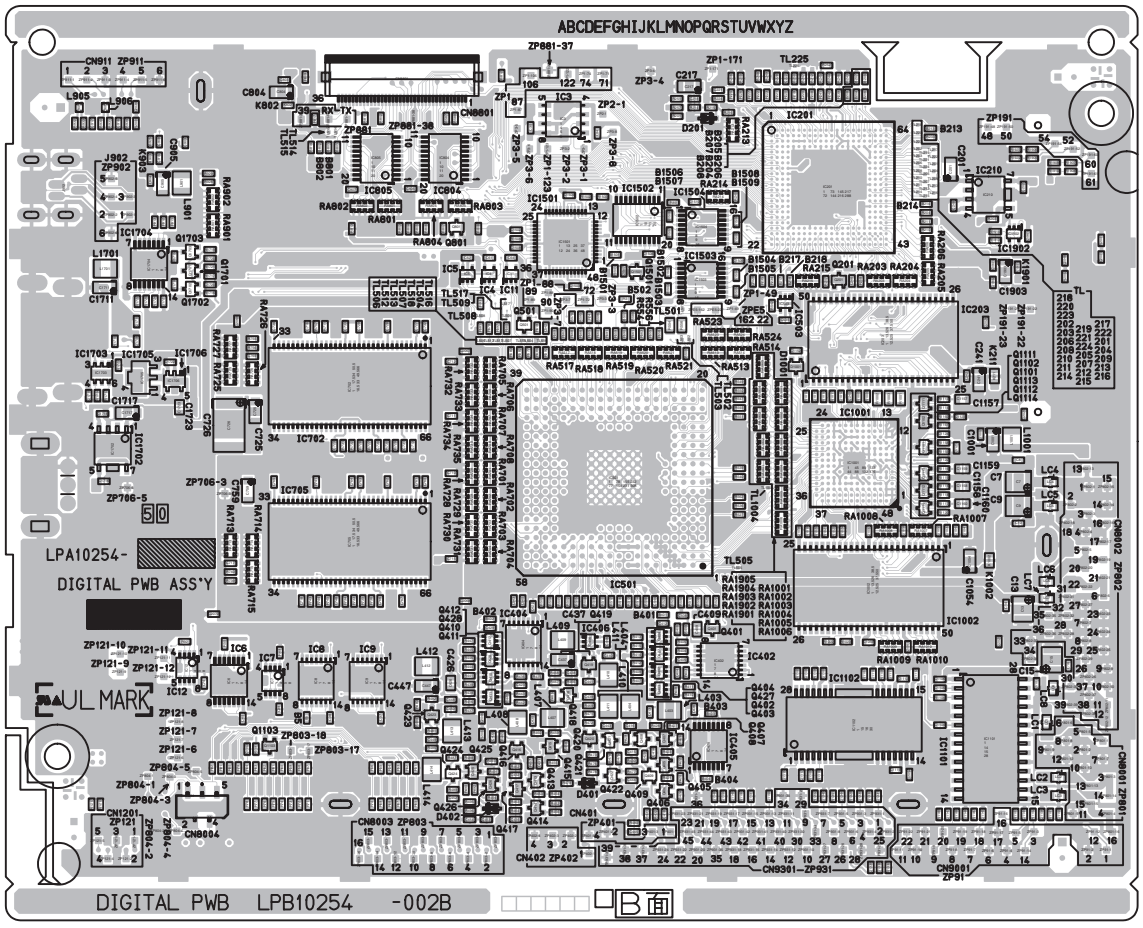
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCA
CAPACITOR		C409	B C 7C	C737	A C 4C	C1112	B C 9C	C1711	B C 1F	IC1303	A C 8B	R3	B C 6F	R227	B C 7H	R496	B C 5B	R746	A C 3C	R1166	A C
C1	A C 10C	C410	A C 6C	C738	A C 4C	C1113	B C 9C	C1712	A C 2G	IC1501	B C 6G	R4	A C 6F	R228	B C 8H	R499	B C 7C	R747	A C 5E	R1167	A C
C2	A C 10C	C411	A C 6C	C739	A C 4C	C1114	A C 9C	C1713	A C 2F	IC1502	B C 6G	R5	A C 7F	R229	A C 8H	R501	B C 6C	R748	A C 5E	R1168	A C
C3	A C 10B	C412	B C 7C	C740	A C 4E	C1115	B C 8B	C1715	A C 2F	IC1503	B C 7F	R6	A C 6F	R230	A C 8H	R502	B C 6C	R749	A C 5D	R1169	A C
C4	A C 10B	C413	B C 6B	C741	A C 4E	C1117	B C 8B	C1716	B C 1E	IC1504	B C 7G	R7	A C 6F	R231	A C 8H	R503	B C 5C	R750	A C 5D	R1170	A C
C5	A C 10B	C414	B C 6B	C742	A C 4C	C1119	B C 9B	C1717	B C 2E	IC1701	A C 2F	R8	A C 6F	R232	A C 8H	R504	B C 5C	R751	A C 3C	R1171	A C
C6	A C 9B	C415	B C 6B	C743	A C 4C	C1120	A C 9E	C1718	B C 1E	IC1702	B C 1E	R9	A C 6F	R233	B C 9H	R505	B C 6C	R752	A C 2E	R1172	A C
C7	B C 10E	C416	B C 6B	C744	A C 3C	C1121	B C 9E	C1719	B C 1E	IC1703	B C 1F	R10	A C 6F	R234	B C 8F	R506	B C 6C	R753	A C 2E	R1173	A C
C8	B C 10E	C417	A C 6B	C747	A C 4F	C1122	B C 9E	C1720	B C 2F	IC1704	B C 2G	R11	A C 6F	R235	B C 7F	R508	B C 6C	R754	A C 3E	R1174	A C
C9	B C 10D	C418	B C 7A	C748	B C 4C	C1123	B C 9E	C1721	B C 2F	IC1705	B C 2E	R12	A C 6F	R236	A C 8H	R509	B C 7F	R755	B C 3F	R1175	A C
C10	B C 10D	C422	B C 5C	C750	A C 3F	C1124	B C 9E	C1722	B C 2F	IC1706	B C 2E	R13	A C 6F	R237	A C 8G	R510	B C 6C	R756	B C 3F	R1176	A C
C11	A C 10D	C423	B C 5C	C751	A C 4E	C1126	A C 9F	C1723	B C 2E	IC1901	A C 9G	R14	A C 5F	R238	A C 8G	R512	B C 6C	R757	B C 3F	R1177	A C
C12	A C 10D	C425	A C 5C	C752	A C 4E	C1127	A C 9F	C1901	B C 10G	IC1902	B C 10G	R15	A C 5F	R239	B C 8H	R513	B C 6C	R758	A C 3C	R1178	A C
C13	B C 10C	C426	B C 5C	C753	A C 4E	C1128	A C 8C	C1902	B C 10F			R16	A C 5F	R240	B C 7G	R514	B C 6C	R801	B C 4H	R1179	A C
C14	B C 10C	C427	A C 5C	C754	A C 4E	C1129	A C 8D	C1903	B C 10F	**COIL**		R17	A C 5F	R241	B C 8H	R516	B C 6C	R802	B C 4H	R1180	A C
C15	B C 10C	C428	A C 5C	C755	A C 4E	C1130	A C 9C	C1904	A C 9F	L201	A C 9H	R18	A C 5F	R242	B C 8H	R517	B C 7C	R803	B C 4G	R1181	A C
C16	B C 10C	C429	B C 5C	C756	A C 3E	C1131	A C 9C	C1905	A C 9G	L202	A C 9G	R19	A C 5F	R243	B C 8H	R519	B C 5F	R804	B C 4G	R1182	A C
C17	A C 7F	C430	B C 5B	C757	A C 4F	C1132	A C 8D	C1959	A C 10H	L401	A C 6C	R20	A C 5G	R244	B C 8H	R520	B C 7C	R805	B C 4G	R1183	A C
C19	A C 9E	C431	B C 5B	C758	A C 4F	C1133	A C 8D	C1960	A C 10G	L402	A C 6C	R21	A C 5G	R245	B C 8H	R521	B C 7C	R806	B C 4G	R1184	A C
C20	A C 10E	C432	B C 5B	C759	B C 3D	C1134	A C 9D	C1961	B C 10G	L403	B C 7B	R22	A C 5G	R246	B C 8H	R522	B C 7C	R807	B C 5G	R1185	A C
C21	A C 10D	C433	B C 5B	C760	B C 4E	C1135	A C 9E	C2001	B C 11G	L404	B C 6B	R23	A C 5G	R247	B C 8H	R523	B C 7C	R808	B C 5G	R1187	B C
C22	A C 7G	C434	A C 5B	C761	B C 4E	C1136	A C 9E	C2020	B C 10C	L405	A C 5C	R24	B C 6F	R248	B C 7H	R524	A C 6E	R809	B C 3H	R1188	B C
C23	A C 7F	C435	B C 5A	C762	B C 4E	C1137	A C 9E	C2021	A C 6D	L406	A C 5C	R25	A C 5G	R249	B C 7H	R525	A C 6E	R810	B C 4H	R1189	B C
C24	A C 7F	C436	B C 7B	C763	B C 4E	C1138	A C 9E	C2022	A C 9C	L407	B C 6B	R26	A C 5F	R250	B C 8H	R527	B C 7D	R812	B C 5H	R1190	B C
C25	A C 7F	C437	B C 6C	C764	B C 4E	C1139	A C 9E	C2023	A C 8C	L408	B C 5B	R27	A C 5F	R251	B C 7H	R536	B C 7D	R813	B C 4G	R1191	B C
C26	A C 6F	C438	B C 6C	C765	B C 3E	C1140	A C 9E	C2024	A C 7D	L409	B C 6C	R28	A C 5F	R252	B C 8H	R539	B C 7E	R814	B C 3H	R1201	A C
C27	A C 6F	C439	B C 6C	C766	B C 4C	C1141	A C 8E	C2025	B C 10E	L410	B C 6C	R29	A C 5G	R254	A C 8F	R540	B C 7E	R817	B C 3H	R1202	A C
C28	A C 5F	C440	B C 6C	C767	B C 4C	C1142	A C 9D	C2026	B C 9F	L411	B C 6B	R30	A C 5G	R255	A C 8F	R541	A C 6D	R902	A C 3G	R1203	A C
C29	A C 5G	C441	B C 6C	C768	A C 5D	C1143	A C 9D	C2027	A C 8F	L412	B C 4C	R31	A C 5G	R257	B C 7H	R542	B C 8F	R903	A C 3G	R1204	A C
C30	B C 5H	C442	A C 5C	C769	B C 3F	C1144	B C 10A	C2028	A C 9G	L413	B C 5B	R32	A C 5G	R258	B C 8F	R547	B C 7E	R904	A C 1H	R1205	A C
C31	A C 6H	C443	B C 6B	C770	A C 3E	C1145	B C 9A	C2029	B C 7F	L414	B C 4B	R33	A C 5G	R259	A C 8F	R549	B C 7E	R905	A C 1G	R1206	A C
C32	A C 6H	C444	B C 6B	C771	A C 3E	C1146	B C 9A	C2030	A C 9E	L501	A C 6D	R34	A C 5G	R260	A C 8F	R550	B C 7E	R906	A C 2G	R1207	A C
C33	A C 6H	C445	B C 6A	C802	A C 5H	C1147	B C 9A	C2031	A C 8D	L901	B C 2G	R35	A C 6H	R261	A C 8G	R551	B C 7E	R907	A C 2G	R1208	A C
C34	B C 6H	C446	B C 6C	C803	B C 3H	C1148	B C 7B	C2032	A C 7D	L903	A C 1G	R36	A C 5H	R266	A C 9G	R552	A C 6E	R908	A C 2G	R1209	A C
C35	A C 7H	C447	B C 4C	C804	B C 3H	C1149	B C 7B	C2034	B C 2H	L904	A C 1G	R37	A C 5H	R403	B C 7C	R554	B C 7F	R909	A C 2G	R1210	A C
C36	A C 7H	C448	B C 5C	C806	B C 4G	C1150	B C 8B	C2046	B C 5B	L905	B C 1H	R38	A C 6H	R404	B C 7C	R555	B C 6F	R910	A C 2G	R1211	A C
C37	B C 4B	C449	B C 4B	C807	B C 4G	C1151	B C 7B	C2048	B C 10G	L906	B C 1H	R39	A C 6H	R405	B C 7C	R556	B C 7F	R911	B C 2G	R1212	A C
C38	B C 3B	C450	B C 5B	C903	B C 2H	C1152	B C 8F	C2054	B C 9B	L1001	B C 10E	R40	A C 6H	R406	B C 7C	R558	B C 6F	R912	B C 2G	R1213	B C
C39	B C 3B	C451	A C 4B	C904	B C 2G	C1153	B C 3B	C2067	B C 5F	L1101	A C 9C	R41	A C 6H	R407	B C 6C	R559	B C 6F	R913	B C 2G	R1214	A C
C40	B C 3B	C452	B C 5B	C905	B C 2G	C1154	B C 7B	C2068	B C 5C	L1102	A C 9C	R42	A C 6H	R408	B C 7C	R560	B C 6F	R919	A C 1G	R1215	A C
C41	A C 4B	C453	B C 5A	C906	A C 2H	C1155	B C 10A	C2069	B C 3F	L1103	A C 9E	R43	A C 6H	R409	B C 6C	R561	B C 6F	R920	A C 1G	R1216	A C
C42	A C 4B	C454	B C 5A	C907	A C 2H	C1156	B C 10A	C2070	B C 2C	L1104	A C 9F	R44	A C 7H	R410	B C 7C	R562	B C 7D	R921	A C 1G	R1217	B C
C43	A C 4B	C501	A C 7D	C908	B C 2H	C1157	B C 9E			L1105	A C 8D	R45	A C 7H	R411	B C 7C	R563	B C 6F	R922	A C 1G	R1218	A C
C44	A C 4B	C502	A C 6E	C909	A C 2G	C1158	B C 9D	**CONNECTOR**		L1106	A C 9D	R46	A C 7H	R412	B C 6C	R565	B C 6F	R923	A C 1G	R1219	A C
C45	A C 4B	C503	A C 6E	C910	A C 2G	C1159	B C 9E	CN401	A C 7A	L1107	A C 9E	R47	A C 7H	R413	B C 6C	R566	B C 6F	R924	A C 3G	R1220	A C
C46	A C 4B	C504	A C 6D	C913	A C 1G	C1160	B C 9D	CN402	A C 6A	L1108	A C 8E	R48	A C 7H	R414	B C 6C	R567	B C 6F	R925	B C 2H	R1221	A C
C47	A C 3B	C505	A C 6E	C914	A C 1G	C1201	A C 1B	CN911	A C 1H	L1301	A C 8C	R49	B C 3C	R415	B C 6C	R568	B C 6F	R926	A C 3G	R1222	A C
C48	A C 3B	C506	A C 6E	C915	B C 2H	C1202	A C 2B	CN1201	A C 2A	L1302	A C 7C	R50	B C 3C	R416	B C 5C	R569	B C 6F	R927	A C 3G	R1223	A C
C49	A C 3B	C507	A C 6E	C916	B C 2H	C1203	A C 2B	CN1901	A C 10F	L1303	A C 8C	R51	B C 4B	R420	B C 7B	R570	A C 5E	R928	B C 2G	R1224	A C
C50	A C 3B	C508	A C 6E	C917	B C 1H	C1204	A C 1C	CN8001	A C 11B	L1701	B C 1F	R52	B C 4B	R421	B C 7B	R571	A C 6E	R929	B C 2G	R1225	A C
C51	A C 3B	C509	A C 7E	C1001	B C 10E	C1205	A C 1C	CN8002	A C 10D	L1702	A C 1F	R53	B C 4B	R422	B C 7B	R575	B C 6F	R930	B C 1H	R1226	A C
C52	A C 3B	C510	A C 6D	C1002	B C 9E	C1206	A C 2C	CN8003	A C 4A	L1703	A C 1F	R54	B C 4B	R423	B C 7B	R576	A C 5E	R931	B C 1H	R1227	A C
C53	A C 3B	C511	A C 6D	C1003	A C 8D	C1207	A C 2C	CN8004	B C 2B	L1704	A C 1F	R55	B C 4B	R424	B C 7B	R577	B C 5F	R932	B C 1H	R1228	A C
C54	A C 3B	C512	A C 6E	C1004	A C 8D	C1208	A C 2C	CN8801	B C 4H	L1705	A C 1F	R56	B C 4B	R425	B C 6B	R579	B C 5F	R933	B C 1H	R1229	A C
C55	A C 3B	C513	A C 6E	C1005	A C 8E	C1209	A C 2C	CN8802	A C 2A			R57	B C 3B	R426	B C 7B	R580	B C 5F	R934	B C 2H	R1230	A C
C56	A C 3B	C514	A C 6E	C1006	A C 8E	C1210	A C 2B	CN9001	A C 10A	**TRANSISTOR**		R58	B C 3B	R427	B C 7B	R581	B C 5F	R1001	B C 9E	R1301	A C
C57	A C 2B	C515	A C 6D	C1007	A C 8E	C1301	A C 7B	CN9301	A C 8A	Q1	A C 6H	R59	B C 3B	R428	B C 6B	R582	B C 5F	R1002	B C 8E	R1302	A C
C58	A C 2B	C516	A C 6D	C1008	A C 8E	C1302	A C 7B			Q201	B C 8F	R60	B C 3B	R429	B C 6B	R583	B C 5F	R1003	B C 9E	R1303	A C
C59	A C 5G	C517	A C 7E	C1009	A C 8E	C1303	A C 7C	**DIODE**		Q401	B C 7C	R61	B C 3B	R430	B C 6B	R584	B C 5F	R1004	B C 8E	R1304	A C
C60	A C 3B	C518	A C 6E	C1010	A C 8E	C1304	A C 7C	D201	B C 7H	Q402	B C 6C	R62	B C 3B	R431	B C 6A	R587	B C 5H	R1005	B C 8E	R1305	A C
C61	B C 5G	C519	A C 6E	C1012	B C 8E	C1305	A C 7C	D203	A C 8G	Q403	B C 6C	R63	B C 3B	R432	B C 6A	R588	B C 5H	R1006	A C 8E	R1306	A C
C62	B C 5G	C520	A C 6E	C1013	A C 8E	C1306	A C 7C	D401	B C 6B	Q404	B C 6C	R64	B C 3B	R435	B C 5C	R589	B C 6F	R1007	A C 8E	R1307	A C
C63	A C 6H	C521	A C 6D	C1014	B C 8E	C1307	A C 7C	D402	B C 5B	Q405	B C 7B	R65	B C 4B	R436	B C 5C	R590	B C 6F	R1008	A C 8E	R1308	A C
C64	B C 5G	C522	A C 6D	C1016	A C 8E	C1308	A C 7C	D1001	B C 8F	Q406	B C 7B	R66	B C 4B	R437	B C 5B	R591	B C 6F	R1009	A C 8E	R1309	A C
C72	A C 10C	C524	A C 6E	C1017	A C 8E	C1309	A C 7C	D1705	A C 1E	Q407	B C 7B	R67	B C 4B	R438	B C 5C	R592	B C 5F	R1010	B C 8E	R1310	A C
C73	A C 10C	C526	A C 6D	C1018	A C 8E	C1310	A C 7B	D1706	A C 1E	Q408	B C 6B	R68	B C 4B	R439	B C 5C	R593	B C 7E	R1011	B C 8E	R1311	A C
C74	B C 2C	C527	A C 6D	C1019	A C 8E	C1311	A C 7C			Q409	B C 6B	R69	B C 4B	R440	B C 5C	R594	B C 7C	R1012	B C 8E	R1312	A C
C201	B C 9G	C528	A C 6D	C1020	A C 8E	C1312	A C 8C	**IC**		Q410	B C 5C	R70	B C 4B	R441	B C 5C	R595	B C 6F	R1013	A C 8E	R1313	A C
C202	B C 10G	C529	A C 6D	C1021	A C 8E	C1313	A C 8C	IC1	A C 6G	Q411	B C 5C	R71	B C 3B	R442	B C 5C	R596	B C 6F	R1014	A C 8E	R1314	A C
C203	A C 9H	C530	A C 6D	C1022	A C 8E	C1314	A C 8C	IC2	A C 6H	Q412	B C 5C	R72	B C 3B	R443	B C 5C	R597	B C 5F	R1015	A C 8E	R1315	A C
C204	A C 8G	C531	A C 6D	C1023	A C 8E	C1315	A C 8C	IC3	B C 6H	Q413	B C 5B	R73	B C 3B	R444	B C 5C	R598	B C 6C	R1016	A C 8E	R1316	A C
C205	A C 8H	C532	A C 7E	C1024	A C 8E	C1316	A C 8B	IC4	B C 5F	Q414	B C 5B	R74	B C 3B	R445	B C 5C	R599	B C 7C	R1017	A C 8D	R1317	A C
C206	A C 9H	C534	A C 7E	C1025	A C 8D	C1317	A C 8B	IC5	B C 5F	Q415	B C 5B	R75	B C 3B	R446	B C 5C	R600	A C 6E	R1018	A C 8E	R1318	A C
C207	A C 8H	C535	B C 8F	C1026	A C 8E	C1318	A C 7C	IC6	B C 3C	Q416	B C 5B	R76	B C 3B	R447	B C 5C	R701	A C 5E	R1019	B C 8D	R1319	A C
C209	A C 8G	C537	A C 7E	C1027	A C 8D	C1319	A C 9B	IC7	B C 3C	Q417	B C 5B	R77	B C 3B	R452	B C 6B	R702	A C 5D	R1020	B C 8D	R1320	A C
C210	A C 9G	C538	A C 6D	C1028	A C 8D	C1320	A C 7B	IC8	B C 3C	Q418	B C 6C	R78	B C 3B	R453	B C 5B	R703	A C 5E	R1021	B C 8D	R1321	A C
C211	A C 8G	C539	A C 6D	C1029	A C 8E	C1321	A C 7B	IC9	B C 4C	Q419	B C 6C	R79	B C 3B	R454	B C 6B	R704	A C 5D	R1022	B C 8C	R1322	A C
C212	A C 8G	C540	B C 5C	C1030	A C 8D	C1322	A C 8B	IC10	A C 10E	Q420	B C 6B	R80	B C 3B	R455	B C 6B	R707	A C 5D	R1023	B C 8C	R1323	A C
C213	A C 8G	C541	A C 6E	C1031	A C 8D	C1323	A C 7B	IC11	B C 5F	Q421	B C 6B	R81	B C 2B	R456	B C 6A	R708	A C 5D	R1024	B C 8D	R1324	A C
C214	A C 8G	C542	B C 5F	C1032	A C 8D	C1324	A C 7B	IC12	B C 2C	Q422	B C 6B	R82	B C 2B	R457	B C 5B	R709	A C 5D	R1025	B C 8D	R1325	A C
C215	A C 8G	C543	B C 5C	C1033	B C 9D	C1325	A C 7B	IC201	B C 8G	Q423	B C 4B	R83	A C 5H	R458	B C 6B	R710	A C 5D	R1026	A C 8D	R1326	A C
C216	A C 9G	C544	B C 6C	C1034	A C 8E	C1326	A C 7B	IC203	B C 9F	Q424	B C 5B	R84	A C 5H	R459	B C 6B	R711	B C 3F	R1027	A C 8E	R1327	A C
C217	B C 7H	C545	A C 8E	C1035	A C 9D	C1327	A C 7B	IC204	A C 8G	Q425	B C 5B	R85	A C 5H	R460	B C 5B	R712	A C 3F	R1028	A C 8E	R1328	A C
C218	B C 7H	C546	A C 8E	C1036	A C 8E	C1328	A C 9B	IC205	A C 8F	Q426	B C 5B	R86	A C 5H	R461	B C 5B	R713	A C 3F	R1029	A C 9E	R1329	B C
C219	A C 8H	C547	A C 8E	C1037	A C 8E	C1329	A C 8B	IC206	A C 9F	Q427	B C 6C	R87	A C 5G	R462	B C 5B	R714	A C 4F	R1030	A C 9E	R1330	B C
C220	B C 8H	C548	A C 7E	C1038	A C 8E	C1330	B C 8B	IC207	A C 8H	Q428	B C 5C	R88	A C 5F	R463	B C 5B	R715	A C 5E	R1031	A C 9E	R1331	A C
C221	B C 7H	C549	A C 7E	C1039	A C 8E	C1331	B C 9B	IC208	A C 8H	Q501	B C 5F	R89	B C 7G	R464	B C 5B	R716	A C 5E	R1032	A C 9E	R1332	B C
C222	B C 8H	C550	A C 6E	C1040	B C 9D	C1332	A C 9B	IC210	B C 10G	Q801	B C 5G	R90	A C 6F	R465	B C 6C	R717	A C 5E	R1033	A C 9E	R1333	A C
C223	A C 8H	C701	A C 5E	C1041	B C 9D	C1333	A C 8B	IC211	A C 9G	Q1101	B C 9E	R91	A C 6F	R466	B C 6C	R718	A C 5D	R1034	A C 9E	R1334	A C
C224	A C 8H	C702	A C 3D	C1044	A C 9E	C1334	A C 9B	IC402	B C 7C	Q1102	B C 9E	R92	B C 2C	R467	B C 6C	R719	A C 5E	R1035	A C 8D	R1335	A C
C225	A C 8H	C707	A C 3D	C1045	A C 9E	C1335	A C 8B	IC404	B C 5C	Q1103	B C 3B	R93	B C 5F	R468	B C 6C	R720	A C 5E	R1101	B C 10A	R1336	A C
C226	A C 8H	C708	A C 2D	C1046	A C 9E	C1336	A C 9B	IC405	B C 7B	Q1104	A C 9D	R201	B C 7H	R469	B C 6B	R721	A C 5D	R1102	B C 10A	R1337	A C
C227	A C 8G	C710	B C 5E	C1047	A C 9E	C1337	A C 8B	IC406	B C 6C	Q1105	A C 8D	R203	B C 10G	R471	B C 6B	R722	A C 5D	R1103	B C 10A	R1338	A C
C228	A C 8H	C711	B C 5E	C1048	A C 8E	C1338	B C 9A	IC501	B C 6E	Q1106	A C 9D	R204	B C 9G	R472	B C 6B	R723	A C 5E	R1104	B C 9C	R1339	A C
C229	A C 8F	C712	B C 5F	C1049	A C 9E	C1339	B C 8A	IC502	A C 7D	Q1107	A C 9E	R205	B C 7H	R473	B C 6B	R724	A C 5D	R1105	B C 8C	R1342	A C
C230	A C 9F	C713	B C 4E	C1050	A C 9E	C1340	A C 9B	IC503	B C 8F	Q1108	A C 9E	R206	B C 7H	R474	B C 6B	R725	A C 5E	R1106	B C 8C	R1343	A C
C231	A C 8G	C715	B C 5D	C1051	A C 8E	C1341	A C 8B	IC504	A C 7E	Q1109	A C 9E	R207	B C 8F	R475	B C 6B	R726	A C 5D	R1107	B C 8C	R1346	A C
C232	A C 7G	C716	B C 3F	C1052	A C 8F	C1343	A C 7B	IC505	A C 6D	Q1110	A C 9D	R208	B C 8H	R476	B C 6B	R727	B C 4E	R1108	B C 9C	R1347	A C
C233	A C 8G	C717	B C 3D	C1053	A C 8F	C1344	B C 8B	IC702	B C 4E	Q1111	B C 9E	R209	A C 9G	R477	B C 6B	R728	B C 4E	R1109	B C 8B	R1348	A C
C234	A C 8G	C718	B C 3C	C1054	B C 9D	C1345	B C 8B	IC703	A C 4D	Q1112	B C 9D	R210	B C 9G	R478	B C 6B	R729	B C 4E	R1110	B C 8B	R1349	A C
C235	A C 8F	C719	A C 3C	C1055	B C 9D	C1346	A C 1E	IC704	A C 4E	Q1113	B C 9E	R211	B C 9G	R479	B C 6B	R730	B C 4E	R1113	B C 9E	R1350	A C
C236	A C 8F	C720	A C 3F	C1056	B C 9D	C1502	B C 5G	IC705	B C 4D	Q1114	B C 9D	R212	B C 8H	R480	B C 6A	R731	B C 4E	R1114	B C 9E	R1351	B C
C240	B C 8E	C723	B C 4E	C1057	B C 8D	C1503	B C 6F	IC706	A C 3E	Q1201	A C 2B	R213	A C 9G	R481	B C 4B	R732	B C 4E	R1115	B C 9D	R1352	B C
C241	B C 9E	C724	A C 4E	C1058	B C 8D	C1504	B C 6G	IC802	A C 5H	Q1202	A C 2B	R214	B C 7H	R482	B C 4C	R733	B C 4C	R1116	B C 9E	R1353	A C
C242	B C 9F	C725	B C 3E	C1059	B C 8C	C1506	B C 6G	IC803	A C 4H	Q1301	A C 7C	R215	B C 7H	R483	B C 4B	R734	B C 4C	R1117	B C 9D	R1354	A C
C243	A C 8F	C726	B C 3E	C1060	B C 9C	C1507	B C 6F	IC804	B C 5H	Q1302	A C 7C	R216	B C 7H	R484	B C 4B	R735	B C 4C	R1118	B C 9D	R1501	B C
C246	B C 8F	C727	B C 4F	C1101	A C 9C	C1508	B C 5G	IC805	B C 4H	Q1303	A C 9B	R217	A C 8H	R485	B C 4B	R736	B C 4C	R1119	B C 9E	R1502	B C
C248	B C 9G	C728	B C 4F	C1102	B C 10C	C1509	B C 7G	IC901	A C 2G	Q1304	A C 8B	R218	A C 8H	R487	B C 5B	R737	A C 3C	R1120	B C 9D	R1503	B C
C249	A C 9G	C729	B C 4F	C1103	A C 9B	C1510	B C 7G	IC1001	B C 8E	Q1501	B C 6F	R219	B C 8H	R488	B C 5B	R738	A C 4C	R1158	B C 9E	R1504	B C
C250	A C 8F	C730	B C 4E	C1104	B C 9B	C1701	A C 2F	IC1002	B C 8D	Q1701	B C 2F	R220	B C 8H	R489	B C 5B	R739	B C 3D	R1159	B C 9E	R1701	A C
C401	A C 6C	C731	B C 4E	C1105	B C 9C	C1702	A C 3F	IC1101	B C 10B	Q1702	B C 2F	R221	B C 8H	R490	B C 5B	R740	B C 3D	R1160	B C 9E	R1702	A C
C402	A C 4B	C732	B C 4F	C1106	B C 9C	C1705	A C 2E	IC1102	B C 8B	Q1703	B C 2G	R222	B C 7H	R491	B C 5B	R741	B C 3E	R1161	B C 9E	R1703	A C
C404	B C 7C	C733	B C 4F	C1108	B C 8C	C1706	A C 2E	IC1201	A C 2C			R223	B C 7H	R492	B C 5B	R742	A C 3C	R1162	A C 8C	R1704	A C
C405	B C 7C	C734	B C 3F	C1109	B C 8C	C1707	A C 2E	IC1202	A C 2B	**RESISTOR**		R224	B C 7H	R493	B C 5B	R743	B C 3C	R1163	A C 9C	R1705	A C
C407	A C 6C	C735	A C 3D	C1110	B C 8C	C1708	B C 2F	IC1301	A C 8C	R1	A C 10D	R225	B C 7H	R494	B C 5B	R744	B C 3C	R1164	A C 8D	R1706	A C
C408	B C 7C	C736	A C 3F	C1111	B C 9C	C1710	B C 2F	IC1302	A C 7B	R2	A C 6F	R226	B C 7H	R495	B C 5B	R745	B C 3C	R1165	A C 9D	R1709	A C

N	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
IC	R1166	A C 9D	R1710	B C 2F	RA524	B C 7F
iE	R1167	A C 8D	R1713	B C 1E	RA701	B C 5E
iE	R1168	A C 9D	R1714	B C 1E	RA702	B C 5D
iD	R1169	A C 8D	R1715	B C 2G	RA703	B C 5D
iD	R1170	A C 9E	R1716	B C 2F	RA704	B C 5D
IC	R1171	A C 9E	R1717	B C 2F	RA705	B C 5F
2E	R1172	A C 9E	R1718	B C 2F	RA706	B C 5E
2E	R1173	A C 9E	R1719	B C 2G	RA707	B C 5E
3E	R1174	A C 9E	R1720	B C 2G	RA708	B C 5E
3F	R1175	A C 9E	R1721	B C 2G	RA713	B C 3D
3F	R1176	A C 9E	R1722	B C 2F	RA714	B C 3D
3F	R1177	A C 8E	R1723	B C 2F	RA715	B C 3D
IC	R1178	A C 8E	R1724	B C 2F	RA717	A C 4F
iH	R1179	A C 9E	R1725	B C 2F	RA718	A C 4F
iH	R1180	A C 9D	R1726	A C 3F	RA719	A C 4E
iG	R1181	A C 9D	R1901	A C 9F	RA720	A C 4E
iG	R1182	A C 9E	R1902	A C 10F	RA721	A C 4E
iG	R1183	A C 9D	R1903	A C 10G	RA722	A C 4E
iG	R1184	A C 9D	R1904	A C 10H	RA723	A C 4C
iG	R1185	A C 9D	R1905	B C 10H	RA724	A C 4C
iG	R1187	B C 9A	R1906	B C 10H	RA725	B C 3F
iH	R1188	B C 9A	R1907	B C 10G	RA726	B C 3F
iH	R1189	B C 9A	R1908	B C 10G	RA727	B C 3F
iH	R1190	B C 7B	R1909	B C 10G	RA728	B C 5E
iG	R1191	B C 3B	R1910	B C 10G	RA729	B C 5D
iH	R1201	A C 2B	R1911	A C 9F	RA730	B C 5D
iH	R1202	A C 2B	R1912	A C 10F	RA731	B C 5D
iG	R1203	A C 2B	R1913	B C 10G	RA732	B C 5F
iG	R1204	A C 1C	R1914	B C 10G	RA733	B C 5E
H	R1205	A C 1C	R1915	A C 9G	RA734	B C 5E
G	R1206	A C 1C	R1916	A C 9G	RA735	B C 5E
iG	R1207	A C 1C	R1917	A C 9G	RA801	B C 4G
iG	R1208	A C 1C	R1918	A C 9G	RA802	B C 4G
iG	R1209	A C 1C	R1919	A C 9F	RA803	B C 5G
iG	R1210	A C 1C	R1920	A C 10G	RA804	B C 4G
iG	R1211	A C 1C	R1921	A C 10H	RA901	B C 2G
iG	R1212	A C 1C	R1922	B C 10H	RA902	B C 2G
iG	R1213	B C 1B	R1923	B C 10H	RA903	A C 3G
iG	R1214	A C 2C	R2001	B C 11G	RA904	A C 3G
G	R1215	A C 2C	R2002	B C 10F	RA1001	B C 8E
G	R1216	A C 2C	R2003	B C 5B	RA1002	B C 8E
G	R1217	B C 1B	R2004	B C 2H	RA1003	B C 8E
G	R1218	A C 2C			RA1004	B C 8E
G	R1219	A C 2C	**OTHER**		RA1005	B C 8D
iG	R1220	A C 2C	FL401	A C 6C	RA1006	B C 8D
5H	R1221	A C 2C	FL402	A C 5B	RA1007	B C 9D
iG	R1222	A C 3C	J902	A D 1G	RA1008	B C 9D
iG	R1223	A C 3C	J1701	A C 1F	RA1009	B C 9C
iG	R1224	A C 3C	K1	A C 2B	RA1010	B C 9C
iG	R1225	A C 3C	K2	A C 5G	RA1701	A C 2F
H	R1226	A C 2B	K202	A C 9G	RA1702	A C 2F
H	R1227	A C 2C	K203	A C 8H	RA1703	A C 3F
H	R1228	A C 2C	K204	A C 9F	RA1704	A C 3F
H	R1229	A C 2C	K205	A C 9F	RA1705	A C 3F
5H	R1230	A C 2C	K206	A C 9F	RA1706	A C 2E
3E	R1301	A C 7B	K207	A C 9F	RA1901	B C 7E
3E	R1302	A C 7B	K208	A C 9G	RA1902	B C 7E
3E	R1303	A C 7B	K209	A C 9G	RA1903	B C 7E
3E	R1304	A C 8B	K210	A C 8G	RA1904	B C 7E
3E	R1305	A C 7C	K211	B C 10F	RA1905	B C 7F
3E	R1306	A C 7C	K213	A C 8G	RA1906	A C 9G
3E	R1307	A C 8C	K214	A C 8G	RA1907	A C 9H
3E	R1308	A C 8C	K215	A C 9G	RA1908	A C 9H
3E	R1309	A C 8C	K501	A C 7D	RA1909	A C 9G
3E	R1310	A C 8C	K503	A C 7D	TM1	A C 1A
3E	R1311	A C 8C	K504	A C 7D	TM2	A C 1A
3E	R1312	A C 9C	K506	A C 6E	TM3	A C 10H
3E	R1313	A C 8B	K509	A C 6D	TM4	A C 10H
3E	R1314	A C 7B	K510	A C 6D	TM5	A C 1H
3E	R1315	A C 7B	K512	A C 7E	TM6	A C 1H
3E	R1316	A C 7B	K513	A C 7D	TM7	A C 10A
1D	R1317	A C 8B	K514	A C 7D	TM8	A C 10A
3E	R1318	A C 7B	K515	A C 7E	X1	A C 7H
1D	R1319	A C 7B	K516	A C 6E	X201	A C 7H
1D	R1320	A C 7B	K517	A C 8E	X202	A C 8F
1D	R1321	A C 9B	K802	B C 3H	X901	A C 3H
IC	R1322	A C 8B	K903	B C 2H	X1201	A C 2D
IC	R1323	A C 9B	K1001	A C 7D		
1D	R1324	A C 8B	K1002	B C 10D		
1D	R1325	A C 9B	K1003	A C 8F		
1D	R1326	A C 8B	K1201	A C 2B		
3E	R1327	A C 9B	K1701	A C 2G		
3E	R1328	A C 8B	K1702	A C 2E		
3E	R1329	B C 8B	K1901	B C 10G		
3E	R1330	B C 8B	LC1	B C 10B		
3E	R1331	A C 9B	LC2	B C 10B		
3E	R1332	B C 9A	LC3	B C 10B		
3E	R1333	A C 9C	LC4	B C 10E		
3E	R1334	A C 8B	LC5	B C 10D		
1D	R1335	A C 9B	LC6	B C 10D		
1A	R1336	A C 8B	LC7	B C 10C		
1A	R1337	A C 9B	LC8	B C 10C		
1A	R1338	A C 8B	RA1	A C 7H		
IC	R1339	A C 7C	RA2	A C 7H		
IC	R1342	A C 8C	RA3	A C 7G		
IC	R1343	A C 7C	RA4	A C 7G		
IC	R1346	A C 7C	RA203	B C 9F		
IC	R1347	A C 7C	RA204	B C 9F		
3B	R1348	A C 8C	RA205	B C 9F		
3B	R1349	A C 9B	RA206	B C 9G		
3E	R1350	A C 8B	RA213	B C 7H		
3E	R1351	B C 8B	RA214	B C 7G		
1D	R1352	B C 8B	RA215	B C 8F		
3E	R1353	A C 1D	RA501	A C 7E		
1D	R1354	A C 1D	RA502	A C 7E		
1D	R1501	B C 6F	RA503	A C 7E		
3E	R1502	B C 6G	RA504	A C 7E		
1D	R1503	B C 6G	RA505	A C 7E		
3E	R1504	B C 5G	RA513	B C 7F		
3E	R1701	A C 3F	RA514	B C 7F		
3E	R1702	A C 2E	RA517	B C 6F		
3E	R1703	A C 2E	RA518	B C 6F		
IC	R1704	A C 2E	RA519	B C 6F		
IC	R1705	A C 2E	RA520	B C 6F		
1D	R1706	A C 2E	RA521	B C 7F		
1D	R1709	A C 2E	RA523	B C 7F		

■ DIGITAL CIRCUIT BOARD(HM-DT100US)

<50> DIGITAL
LPB10254-002B

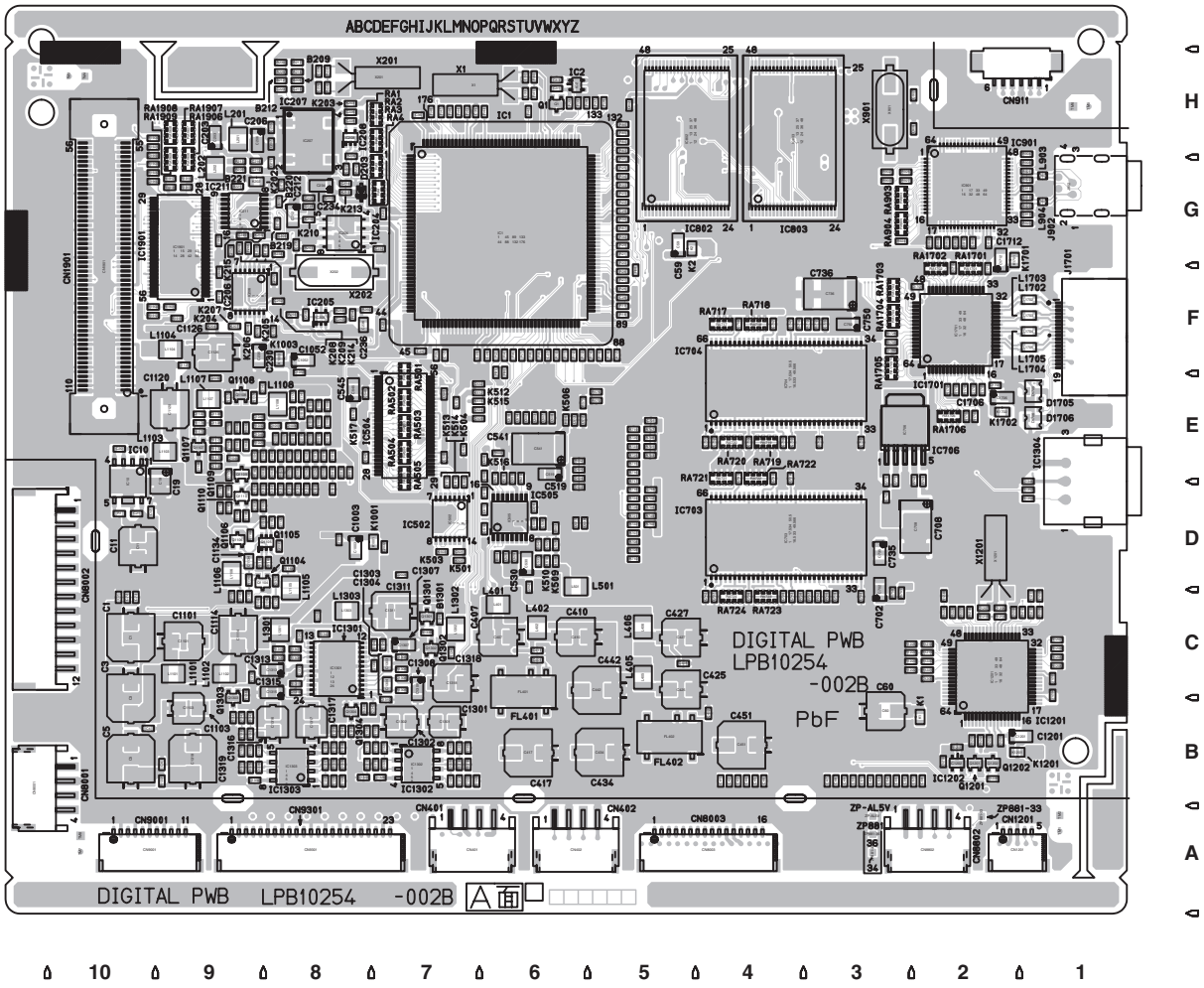
-FOIL SIDE B-



1 2 3 4 5 6 7 8 9 10

<50> DIGITAL
LPB10254-002B

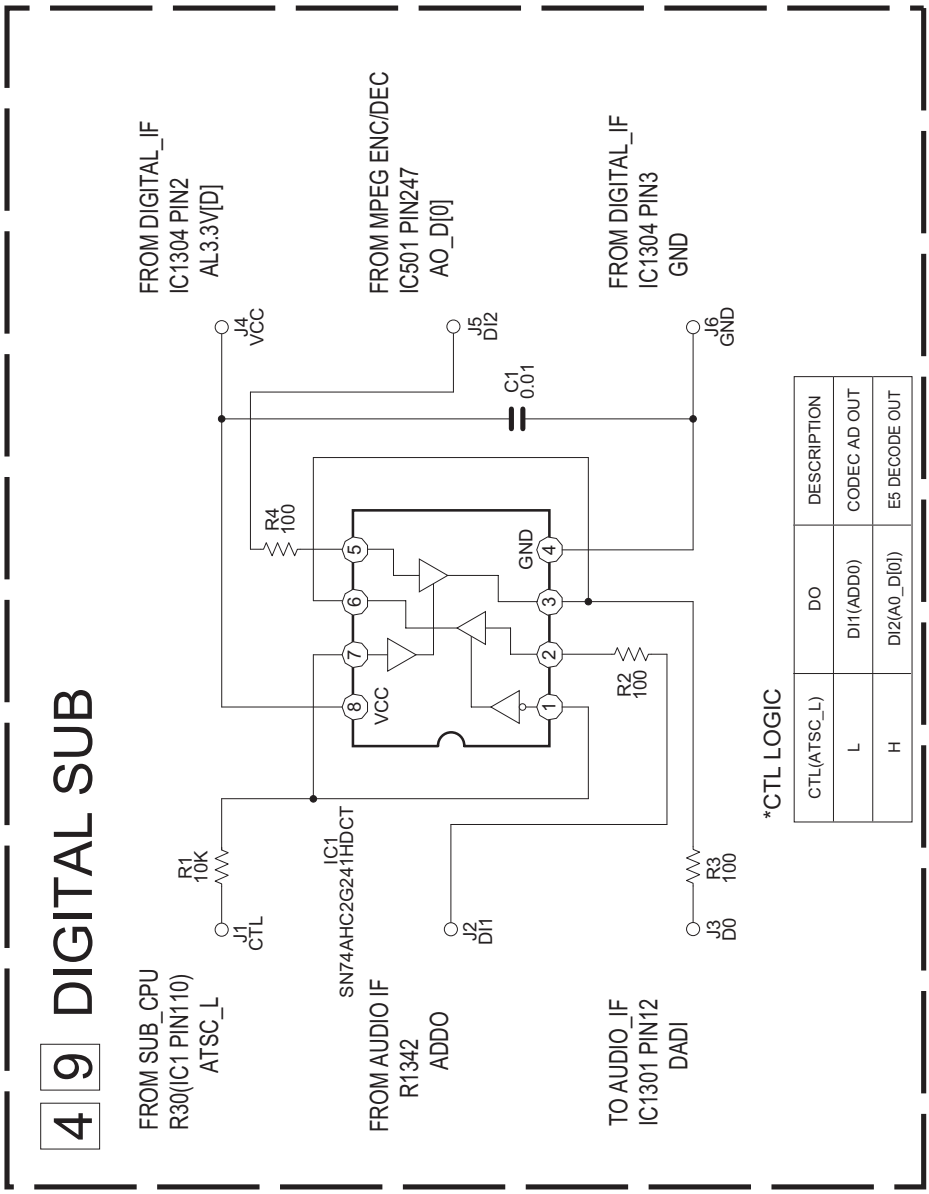
-COMPONENT SIDE A-



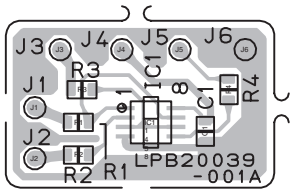
COMPONENT PARTS LOCATION GUIDE <DIGITAL> LPB10254-002B

REF.NO.	LOCATION
CAPACITOR	
C1	A C 10C
C2	A C 10C
C3	A C 10B
C4	A C 10B
C5	A C 10B
C6	A C 9B
C7	B C 10E
C8	B C 10E
C9	B C 10D
C10	B C 10D
C11	A C 10D
C12	A C 10D
C13	B C 10C
C14	B C 10C
C15	B C 10C
C16	B C 10C
C17	A C 7F
C19	A C 9E
C20	A C 10E
C21	A C 10D
C22	A C 7G
C23	A C 7F
C24	A C 7F
C25	A C 7F
C26	A C 6F
C27	A C 6F
C28	A C 5F
C29	A C 5G
C30	B C 5H
C31	A C 6H
C32	A C 6H
C33	A C 6H
C34	B C 6H
C35	A C 7H
C36	A C 7H
C37	B C 4B
C38	B C 3B
C39	B C 3B
C40	B C 3B
C41	A C 4B
C42	A C 4B
C43	A C 4B
C44	A C 4B
C45	A C 4B
C46	A C 4B
C47	A C 3B
C48	A C 3B
C49	A C 3B
C50	A C 3B
C51	A C 3B
C52	A C 3B
C53	A C 3B
C54	A C 3B
C55	A C 3B
C56	A C 3B
C57	A C 2B
C58	A C 2B
C59	A C 5G
C60	A C 3B
C61	B C 5G
C62	B C 5G
C63	A C 6H
C64	B C 5G
C72	A C 10C
C73	A C 10C
C74	B C 2C
C201	B C 9G
C202	B C 10G
C203	A C 9H
C204	A C 8G
C205	A C 8H
C206	A C 9H
C207	A C 8H
C209	A C 8G
C210	A C 9G
C211	A C 8G
C212	A C 8G
C213	A C 8G
C214	A C 8G
C215	A C 8G
C216	A C 9G
C217	B C 7H
C218	B C 7H
C219	A C 8H
C220	B C 8H
C221	B C 7H
C222	B C 8H
C223	A C 8H
C224	A C 8H
C225	A C 8H
C226	A C 8H
C227	A C 8G
C228	A C 8H
C229	A C 8F
C230	A C 9F
C231	A C 8G
C232	A C 7G
C233	A C 8G
C234	A C 8G
C235	A C 8F
C236	A C 8F
C240	B C 8E
C241	B C 9E
C242	B C 9F
C243	A C 8F
C246	B C 8F
C248	B C 9G
C249	A C 9G
C250	A C 8F
C401	A C 6C
C402	A C 4B
C404	B C 7C
C405	B C 7C
C407	A C 6C
C408	B C 7C
C409	B C 7C
C410	A C 6C
C411	A C 6C
C412	B C 7C
C413	B C 6B
C414	B C 6B
C415	B C 6B
C416	B C 6B
C417	A C 6B
C418	B C 7A
C422	B C 5C
C423	B C 5C
C425	A C 5C
C426	B C 5C
C427	A C 5C
C428	A C 5C
C429	B C 5C
C430	B C 5B
C431	B C 5B
C432	B C 5B
C433	B C 5B
C434	A C 5B
C435	B C 5A
C436	B C 7B
C437	B C 6C
C438	B C 6C
C439	B C 6C
C440	B C 6C
C441	B C 6C
C442	A C 5C
C443	B C 6B
C444	B C 6B
C445	B C 6A
C446	B C 6C
C447	B C 4C
C448	B C 5C
C449	B C 4B
C450	B C 5B
C451	A C 4B
C452	B C 5B
C453	B C 5A
C454	B C 5A
C501	A C 7D
C502	A C 6E
C503	A C 6E
C504	A C 6D
C505	A C 6E
C506	A C 6E
C507	A C 6E
C508	A C 6E
C509	A C 7E
C510	A C 6D
C511	A C 6D
C512	A C 6E
C513	A C 6E
C514	A C 6E
C515	A C 6D
C516	A C 6D
C517	A C 7E
C518	A C 6E
C519	A C 6E
C520	A C 6E
C521	A C 6D
C522	A C 6D
C524	A C 6E
C526	A C 6D
C527	A C 6D
C528	A C 6D
C529	A C 6D
C530	A C 6D
C531	A C 6D
C532	A C 7E
C534	A C 7E
C535	B C 8F
C537	A C 7E
C538	A C 6D
C539	A C 6D
C540	B C 5C
C541	A C 6E
C542	B C 5F
C543	B C 5C
C544	B C 6C
C545	A C 8E
C546	A C 8E
C547	A C 8E
C548	A C 7E
C549	A C 7E
C550	A C 6E
C701	A C 5E
C702	A C 3D
C707	A C 3D
C708	A C 2D
C710	B C 5E
C711	B C 5E
C712	B C 5F
C713	B C 4E
C715	B C 5D
C716	B C 3F
C717	B C 3D
C718	B C 3C
C719	A C 3C
C720	A C 3F
C723	B C 4E
C724	A C 4E
C725	B C 3E
C726	B C 3E
C727	B C 4F
C728	B C 4F
C729	B C 4F
C730	B C 4E
C731	B C 4E
C732	B C 4F
C733	B C 4F
C734	B C 3F
C735	A C 3D
C736	A C 3F
C737	A C 4C
C738	A C 4C
C739	A C 4C
C740	A C 4E
C741	A C 4E
C742	A C 4C
C743	A C 4C
C744	A C 3C
C747	A C 4F
C748	B C 4C
C750	A C 3F
C751	A C 4E
C752	A C 4E
C753	A C 4E
C754	A C 4E
C755	A C 4E
C756	A C 3E
C757	A C 4F
C758	A C 4F
C759	B C 3D
C760	B C 4E
C761	B C 4E
C762	B C 4E
C763	B C 4E
C764	B C 4E
C765	B C 3E
C766	B C 4C
C767	B C 4C
C768	A C 5D
C769	B C 3F
C770	A C 3E
C771	A C 3E
C802	A C 5H
C803	B C 3H
C804	B C 3H
C806	B C 4G
C807	B C 4G
C903	B C 2H
C904	B C 2G
C905	B C 2G
C906	A C 2H
C907	A C 2H
C908	B C 2H
C909	A C 2G
C910	A C 2G
C913	A C 1G
C914	A C 1G
C915	B C 2H
C916	B C 2H
C917	B C 1H
C1001	B C 10E
C1002	B C 9E
C1003	A C 8D
C1004	A C 8D
C1005	A C 8E
C1006	A C 8E
C1007	A C 8E
C1008	A C 8E
C1009	A C 8E
C1010	A C 8E
C1012	B C 8E
C1013	A C 8E
C1014	B C 8E
C1016	A C 8E
C1017	A C 8E
C1018	A C 8E
C1019	A C 8E
C1020	A C 8E
C1021	A C 8E
C1022	A C 8E
C1023	A C 8E
C1024	A C 8E
C1025	A C 8D
C1026	A C 8E
C1027	A C 8D
C1028	A C 8D
C1029	A C 8E
C1030	A C 8D
C1031	A C 8D
C1032	A C 8D
C1033	B C 9D
C1034	A C 8E
C1035	A C 9D
C1036	A C 8E
C1037	A C 8E
C1038	A C 8E
C1039	A C 8E
C1040	B C 9D
C1041	B C 9D
C1044	A C 9E
C1045	A C 9E
C1046	A C 9E
C1047	A C 9E
C1048	A C 8E
C1049	A C 9E
C1050	A C 9E
C1051	A C 8E
C1052	A C 8F
C1053	A C 8F
C1054	B C 9D
C1055	B C 9D
C1056	B C 9D
C1057	B C 8D
C1058	B C 8D
C1059	B C 8C
C1060	B C 9C
C1101	A C 9C
C1102	B C 10C
C1103	A C 9B
C1104	B C 9B
C1105	B C 9C
C1106	B C 9C
C1108	B C 8C
C1109	B C 8C
C1110	B C 8C
C1111	B C 9C
C1112	B C 9C
C1113	B C 9C
C1114	A C 9C
C1115	B C 8B
C1117	B C 8B
C1119	B C 9B
C1120	A C 9E
C1121	B C 9E
C1122	B C 9E
C1123	B C 9E
C1124	B C 9E
C1126	A C 9F
C1127	A C 9F
C1128	A C 8C
C1129	A C 8D
C1130	A C 9C
C1131	A C 9C
C1132	A C 8D
C1133	A C 8D
C1134	A C 9D
C1135	A C 9E
C1136	A C 9E
C1137	A C 9E
C1138	A C 9E
C1139	A C 9E
C1140	A C 9E
C1141	A C 8E
C1142	A C 9D
C1143	A C 9D
C1144	B C 10A
C1145	B C 9A
C1146	B C 9A
C1147	B C 9A
C1148	B C 7B
C1149	B C 7B
C1150	B C 8B
C1151	B C 7B
C1152	B C 8F
C1153	B C 3B
C1154	B C 7B
C1155	B C 10A
C1156	B C 10A
C1157	B C 9E
C1158	B C 9D
C1159	B C 9E
C1160	B C 9D
C1201	A C 1B
C1202	A C 2B
C1203	A C 2B
C1204	A C 1C
C1205	A C 1C
C1206	A C 2C
C1207	A C 2C
C1208	A C 2C
C1209	A C 2C
C1210	A C 2B
C1301	A C 7B
C1302	A C 7B
C1303	A C 7C
C1304	A C 7C
C1305	A C 7C
C1306	A C 7C
C1307	A C 7C
C1308	A C 7C
C1309	A C 7C
C1310	A C 7B
C1311	A C 7C
C1312	A C 8C
C1313	A C 8C
C1314	A C 8C
C1315	A C 8C
C1316	A C 8B
C1317	A C 8B
C1318	A C 7C
C1319	A C 9B
C1320	A C 7B
C1321	A C 7B
C1322	A C 8B
C1323	A C 7B
C1324	A C 7B
C1325	A C 7B
C1326	A C 7B
C1327	A C 7B
C1328	A C 9B
C1329	A C 8B
C1330	B C 8B
C1331	B C 9B
C1332	A C 9B
C1333	A C 8B
C1334	A C 9B
C1335	A C 8B
C1336	A C 9B
C1337	A C 8B
C1338	B C 9A
C1339	B C 8A
C1340	A C 9B
C1341	A C 8B
C1343	A C 7B
C1344	B C 8B
C1345	B C 8B
C1346	A C 1E
C1502	B C 5G
C1503	B C 6F
C1504	B C 6G
C1506	B C 6G
C1507	B C 6F
C1508	B C 5G
C1509	B C 7G
C1510	B C 7G
C1701	A C 2F
C1702	A C 3F
C1705	A C 2E
C1706	A C 2E
C1707	A C 2E
C1708	B C 2F
C1710	B C 2F
C1711	B C 1F
C1712	A C 2G
C1713	A C 2F
C1715	A C 2F
C1716	B C 1E
C1717	B C 2E
C1718	B C 1E
C1719	B C 1E
C1720	B C 2F
C1721	B C 2F
C1722	B C 2F
C1723	B C 2E
C1901	B C 10G
C1902	B C 10F
C1903	B C 10F
C1904	A C 9F
C1905	A C 9G
C1959	A C 10H
C1960	A C 10G
C1961	B C 10G
C2001	B C 11G
C2020	B C 10C
C2021	A C 6D
C2022	A C 9C
C2023	A C 8C
C2024	A C 7D
C2025	B C 10E
C2026	B C 9F
C2027	A C 8F
C2028	A C 9G
C2029	B C 7F
C2030	A C 9E
C2031	A C 8D
C2032	A C 7D
C2034	B C 2H
C2046	B C 5B
C2048	B C 10G
C2054	B C 9B
C2067	B C 5F
C2068	B C 5C
C2069	B C 3F
C2070	B C 2C
CONNECTOR	
CN401	A C 7A
CN402	A C 6A
CN911	A C 1H
CN1201	A C 2A
CN1901	A C 10F
CN8001	A C 11B
CN8002	A C 10D
CN8003	A C 4A
CN8004	B C 2B
CN8801	B C 4H
CN8802	A C 2A
CN9001	A C 10A
CN9301	A C 8A
DIODE	
D201	B C 7H
D203	A C 8G
D401	B C 6B
D402	B C 5B
D1001	B C 8F
D1705	A C 1E
D1706	A C 1E
IC	
IC1	A C 6G
IC2	A C 6H
IC3	B C 6H
IC4	B C 5F
IC5	B C 5F
IC6	B C 3C
IC7	B C 3C
IC8	B C 3C
IC9	B C 4C
IC10	A C 10E
IC11	B C 5F
IC12	B C 2C
IC201	B C 8G
IC203	B C 9F
IC204	A C 8G
IC205	A C 8F
IC206	A C 9F
IC207	A C 8H
IC208	A C 8H
IC210	B C 10G
IC211	A C 9G
IC402	B C 7C
IC404	B C 5C
IC405	B C 7B
IC406	B C 6C
IC501	B C 6E
IC502	A C 7D
IC503	B C 8F
IC504	A C 7E
IC505	A C 6D
IC702	B C 4E
IC703	A C 4D
IC704	A C 4E
IC705	B C 4D
IC706	A C 3E
IC802	A C 5H
IC803	A C 4H
IC804	B C 5H
IC805	B C 4H
IC901	A C 2G
IC1001	B C 8E
IC1002	B C 8D
IC1101	B C 10B
IC1102	B C 8B
IC1201	A C 2C
IC1202	A C 2B
IC1301	A C 8C
IC1302	A C 7B
IC1303	A C 8B
IC1501	B C 6G
IC1502	B C 6G
IC1503	B C 7F
IC1504	B C 7G
IC1701	A C 2F
IC1702	B C 1E
IC1703	B C 1F
IC1704	B C 2G
IC1705	B C 2E
IC1706	B C 2E
IC1901	A C 9G
IC1902	B C 10G
COIL	
L201	A C 9H
L202	A C 9G
L401	A C 6C
L402	A C 6C
L403	B C 7B
L404	B C 6B
L405	A C 5C
L406	A C 5C
L407	B C 6B
L408	B C 5B
L409	B C 6C
L410	B C 6C
L411	B C 6B
L412	B C 4C
L413	B C 5B
L414	B C 4B
L501	A C 6D
L901	B C 2G
L903	A C 1G
L904	A C 1G
L905	B C 1H
L906	B C 1H
L1001	B C 10E
L1101	A C 9C
L1102	A C 9C
L1103	A C 9E
L1104	A C 9F
L1105	A C 8D
L1106	A C 9D
L1107	A C 9E
L1108	A C 8E
L1301	A C 8C
L1302	A C 7C
L1303	A C 8C
L1701	B C 1F
L1702	A C 1F
L1703	A C 1F
L1704	A C 1F
L1705	A C 1F
TRANSISTOR	
Q1	A C 6H
Q201	B C 8F
Q401	B C 7C
Q402	B C 6C
Q403	B C 6C
Q404	B C 6C
Q405	B C 7B
Q406	B C 7B
Q407	B C 7B
Q408	B C 6B
Q409	B C 6B
Q410	B C 5C
Q411	B C 5C
Q412	B C 5C
Q413	B C 5B
Q414	B C 5B
Q415	B C 5B
Q416	B C 5B
Q417	B C 5B
Q418	B C 6C
Q419	B C 6C
Q420	B C 6B
Q421	B C 6B
Q422	B C 6B
Q423	B C 4B
Q424	B C 5B
Q425	B C 5B
Q426	B C 5B
Q427	B C 6C
Q428	B C 5C
Q501	B C 5F
Q801	B C 5G
Q1101	B C 9E
Q1102	B C 9E
Q1103	B C 3B
Q1104	A C 9D
Q1105	A C 8D
Q1106	A C 9D
Q1107	A C 9E
Q1108	A C 9E
Q1109	A C 9E
Q1110	A C 9D
Q1111	B C 9E
Q1112	B C 9D
Q1113	B C 9E
Q1114	B C 9D
Q1201	A C 2B
Q1202	A C 2B
Q1301	A C 7C
Q1302	A C 7C
Q1303	A C 9B
Q1304	A C 8B
Q1501	B C 6F
Q1701	B C 2F
Q1702	B C 2F
Q1703	B C 2G
RESISTOR	
R1	A C 10D
R2	A C 6F
R3	B C 6F
R4	A C 6F
R5	A C 7F
R6	A C 6F
R7	A C 6F
R8	A C 6F
R9	A C 6F
R10	A C 6F
R11	A C 6F
R12	A C 6F
R13	A C 6F
R14	A C 5F
R15	A C 5F
R16	A C 5F
R17	A C 5F
R18	A C 5F
R19	A C 5F
R20	A C 5G
R21	A C 5G
R22	A C 5G
R23	A C 5G
R24	B C 6F
R25	A C 5G
R26	A C 5F
R27	A C 5F
R28	A C 5F
R29	A C 5G
R30	A C 5G
R31	A C 5G
R32	A C 5G
R33	A C 5G
R34	A C 5G
R35	A C 6H
R36	A C 5H
R37	A C 5H
R38	A C 6H
R39	A C 6H
R40	A C 6H
R41	A C 6H
R42	A C 6H
R43	A C 6H
R44	A C 7H
R45	A C 7H
R46	A C 7H
R47	A C 7H
R48	A C 7H
R49	B C 3C
R50	B C 3C
R51	B C 4B
R52	B C 4B
R53	B C 4B
R54	B C 4B
R55	B C 4B
R56	B C 4B
R57	B C 3B
R58	B C 3B
R59	B C 3B
R60	B C 3B
R61	B C 3B
R62	B C 3B
R63	B C 3B
R64	B C 3B
R65	B C 4B
R66	B C 4B
R67	B C 4B
R68	B C 4B
R69	B C 4B
R70	B C 4B
R71	B C 3B
R72	B C 3B
R73	B C 3B
R74	B C 3B
R75	B C 3B
R76	B C 3B
R77	B C 3B
R78	B C 3B
R79	B C 3B
R80	B C 3B
R81	B C 2B
R82	B C 2B
R83	A C 5H
R84	A C 5H
R85	A C 5H
R86	A C 5H
R87	A C 5G
R88	A C 5F
R89	B C 7G
R90	A C 6F
R91	A C 6F
R92	B C 2C
R93	B C 5F
R201	B C 7H
R203	B C 10G
R204	B C 9G
R205	B C 7H
R206	B C 7H
R207	B C 8F
R208	B C 8H
R209	A C 9G
R210	B C 9G
R211	B C 9G
R212	B C 8H
R213	A C 9G
R214	B C 7H
R215	B C 7H
R216	B C 7H
R217	A C 8H
R218	A C 8H
R219	B C 8H
R220	B C 8H
R221	B C 8H
R222	B C 7H
R223	B C 7H
R224	B C 7H
R225	B C 7H
R226	B C 7H
R227	B C 7H
R228	B C 8H
R229	A C 8H
R230	A C 8H
R231	A C 8H
R232	A C 8H
R233	B C 9H
R234	B C 8F
R235	B C 7F
R236	A C 8H
R237	A C 8G
R238	A C 8G
R239	B C 8H
R240	B C 7G
R241	B C 8H
R242	B C 8H
R243	B C 8H
R244	B C 8H
R245	B C 8H
R246	B C 8H
R247	B C 8H
R248	B C 7H
R249	B C 7H
R250	B C 8H
R251	B C 7H
R252	B C 8H
R254	A C 8F
R255	A C 8F
R257	B C 7H
R258	B C 8F
R259	A C 8F
R260	A C 8F
R261	A C 8G
R266	A C 9G
R403	B C 7C
R404	B C 7C
R405	B C 7C
R406	B C 7C
R407	B C 6C
R408	B C 7C
R409	B C 6C
R410	B C 7C
R411	B C 7C
R412	B C 6C
R413	B C 6C
R414	B C 6C
R415	B C 6C
R416	B C 5C
R420	B C 7B
R421	B C 7B
R422	B C 7B
R423	B C 7B
R424	B C 7B
R425	B C 6B
R426	B C 7B
R427	B C 7B
R428	B C 6B
R429	B C 6B
R430	B C 6B
R431	B C 6A
R432	B C 6A
R435	B C 5C
R436	B C 5C
R437	B C 5B
R438	B C 5C
R439	B C 5C
R440	B C 5C
R441	B C 5C
R442	B C 5C
R443	B C 5C
R444	B C 5C
R445	B C 5C
R446	B C 5C
R447	B C 5C
R452	B C 6B
R453	B C 5B
R454	B C 6B
R455	B C 6B
R456	B C 6A
R457	B C 5B
R458	B C 6B
R459	B C 6B
R460	B C 5B
R461	B C 5B
R462	B C 5B
R463	B C 5B
R464	B C 5B
R465	B C 6C
R466	B C 6C
R467	B C 6C
R468	B C 6C
R469	B C 6B
R471	B C 6B
R472	B C 6B
R473	B C 6B
R474	B C 6B
R475	B C 6B
R476	B C 6B
R477	B C 6B
R478	B C 6B
R479	B C 6B
R480	B C 6A
R481	B C 4B
R482	B C 4C
R483	B C 4B
R484	B C 4B
R485	B C 4B
R487	B C 5B
R488	B C 5B
R489	B C 5B
R490	B C 5B
R491	B C 5B
R492	B C 5B
R493	B C 5B
R494	B C 5B
R495	B C 5B
R496	B C 5B
R499	B C 7C
R501	B C 6C
R502	B C 6C
R503	B C 5C
R504	B C 5C
R505	B C 6C
R506	B C 6C
R508	B C 6C
R509	B C 7F
R510	B C 6C
R512	B C 6C
R513	B C 6C
R514	B C 6C
R516	B C 6C
R517	B C 7C
R519	B C 5F
R520	B C 7C
R521	B C 7C
R522	B C 7C
R523	B C 7C
R524	A C 6E
R525	A C 6E
R527	B C 7D
R536	B C 7D
R539	B C 7E
R540	B C 7E
R541	A C 6D
R542	B C 8F
R547	B C 7E
R549	B C 7E
R550	B C 7E
R551	B C 7E
R552	A C 6E
R554	B C 7F
R555	B C 6F
R556	B C 7F
R558	B C 6F
R559	B C 6F
R560	B C 6F
R561	B C 6F
R562	B C 7D
R563	B C 6F
R565	B C 6F
R566	B C 6F
R567	B C 6F
R568	B C 6F
R569	B C 6F
R570	A C 5E
R571	A C 6E
R575	B C 6F
R576	A C 5E
R577	B C 5F
R579	B C 5F
R580	B C 5F
R581	B C 5F
R582	B C 5F
R583	B C 5F
R584	B C 5F
R587	B C 5H
R588	B C 5H
R589	B C 6F
R590	B C 6F
R591	B C 6F
R592	B C 5F
R593	B C 7E
R594	B C 7C
R595	B C 6F
R596	B C 6F
R597	B C 5F
R598	B C 6C
R599	B C 7C
R600	A C 6E
R701	A C 5E
R702	A C 5D
R703	A C 5E
R704	A C 5D
R707	A C 5D
R708	A C 5D
R709	A C 5D
R710	A C 5D
R711	B C 3F
R712	A C 3F
R713	A C 3F
R714	A C 4F
R715	A C 5E
R716	A C 5E
R717	A C 5E
R718	A C 5D
R719	A C 5E
R720	A C 5E
R721	A C 5D
R722	A C 5D
R723	A C 5E
R724	A C 5D
R725	A C 5E
R726	A C 5D
R727	B C 4E
R728	B C 4E
R729	B C 4E
R730	B C 4E
R731	B C 4E
R732	B C 4E
R733	B C 4C
R734	B C 4C
R735	B C 4C
R736	B C 4C
R737	A C 3C
R738	A C 4C
R739	B C 3D
R740	B C 3D
R741	B C 3E
R742	A C 3C
R743	B C 3C
R744	B C 3C
R745	B C 3C
R746	A C 3C
R747	A C 5E
R748	A C 5E
R749	A C 5D
R750	A C 5D
R751	A C 3C
R752	A C 2E
R753	A C 2E
R754	A C 3E
R755	B C 3F
R756	B C 3F
R757	B C 3F
R758	A C 3C
R801	B C 4H
R802	B C 4H
R803	B C 4G
R804	B C 4G
R805	B C 4G
R806	B C 4G
R807	B C 5G
R808	B C 5G
R809	B C 3H
R810	B C 4H
R812	B C 5H
R813	B C 4G
R814	B C 3H
R817	B C 3H
R902	A C 3G
R903	A C 3G
R904	A C 1H
R905	A C 1G
R906	A C 2G
R907	A C 2G
R908	A C 2G
R909	A C 2G
R910	A C 2G
R911	B C 2G
R912	B C 2G
R913	B C 2G
R919	A C 1G
R920	A C 1G
R921	A C 1G
R922	A C 1G
R923	A C 1G
R924	A C 3G
R925	B C 2H
R926	A C 3G
R927	A C 3G
R928	B C 2G
R929	B C 2G
R930	B C 1H
R931	B C 1H
R932	B C 1H
R933	B C 1H
R934	B C 2H
R1001	B C 9E
R1002	B C 8E
R1003	B C 9E
R1004	B C 8E
R1005	B C 8E
R1006	A C 8E
R1007	A C 8E
R1008	A C 8E
R1009	A C 8E
R1010	B C 8E
R1011	B C 8E
R1012	B C 8E
R1013	A C 8E
R1014	A C 8E
R1015	A C 8E
R1016	A C 8E
R1017	A C 8D
R1018	A C 8E
R1019	B C 8D
R1020	B C 8D
R1021	B C 8D
R1022	B C 8C
R1023	B C 8C
R1024	B C 8D
R1025	B C 8D
R1026	A C 8D
R1027	A C 8E
R1028	A C 8E
R1029	A C 9E
R1030	A C 9E
R1031	A C 9E
R1032	A C 9E
R1033	A C 9E
R1034	A C 9E
R1035	A C 8D
R1101	B C 10A
R1102	B C 10A
R1103	B C 10A
R1104	B C 9C
R1105	B C 8C
R1106	B C 8C
R1107	B C 8C
R1108	B C 9C
R1109	B C 8B
R1110	B C 8B
R1113	B C 9E
R1114	B C 9E
R1115	B C 9D
R1116	B C 9E
R1117	B C 9D
R1118	B C 9D
R1119	B C 9E
R1120	B C 9D
R1158	B C 9E
R1159	B C 9E
R1160	B C 9E
R1161	B C 9E
R1162	A C 8C
R1163	A C 9C
R1164	A C 8D
R1165	A C 9D
R1166	A C
R1167	A C
R1168	A C
R1169	A C
R1170	A C
R1171	A C
R1172	A C
R1173	A C
R1174	A C
R1175	A C
R1176	A C
R1177	A C
R1178	A C
R1179	A C
R1180	A C
R1181	A C
R1182	A C
R1183	A C
R1184	A C
R1185	A C
R1187	B C
R1188	B C
R1189	B C
R1190	B C
R1191	B C
R1201	A C
R1202	A C
R1203	A C
R1204	A C
R1205	A C
R1206	A C
R1207	A C
R1208	A C
R1209	A C
R1210	A C
R1211	A C
R1212	A C
R1213	B C
R1214	A C
R1215	A C
R1216	A C
R1217	B C
R1218	A C
R1219	A C
R1220	A C
R1221	A C
R1222	A C
R1223	A C
R1224	A C
R1225	A C
R1226	A C
R1227	A C
R1228	A C
R1229	A C
R1230	A C
R1301	A C
R1302	A C
R1303	A C
R1304	A C
R1305	A C
R1306	A C
R1307	A C
R1308	A C
R1309	A C
R1310	A C
R1311	A C
R1312	A C
R1313	A C
R1314	A C
R1315	A C
R1316	A C
R1317	A C
R1318	A C
R1319	A C
R1320	A C
R1321	A C
R1322	A C
R1323	A C
R1324	A C
R1325	A C
R1326	A C
R1327	A C
R1328	A C
R1329	B C
R1330	B C
R1331	A C
R1332	B C
R1333	A C
R1334	A C
R1335	A C
R1336	A C
R1337	A C
R1338	A C
R1339	A C
R1342	A C
R1343	A C
R1346	A C
R1347	A C
R1348	A C
R1349	A C
R1350	A C
R1351	B C
R1352	B C
R1353	A C
R1354	A C
R1501	B C
R1502	B C
R1503	B C
R1504	B C
R1701	A C
R1702	A C
R1703	A C
R1704	A C
R1705	A C
R1706	A C
R1709	A C

■ DIGITAL SUB SCHEMATIC DIAGRAM AND CIRCUIT BOARD (HM-DT100US)



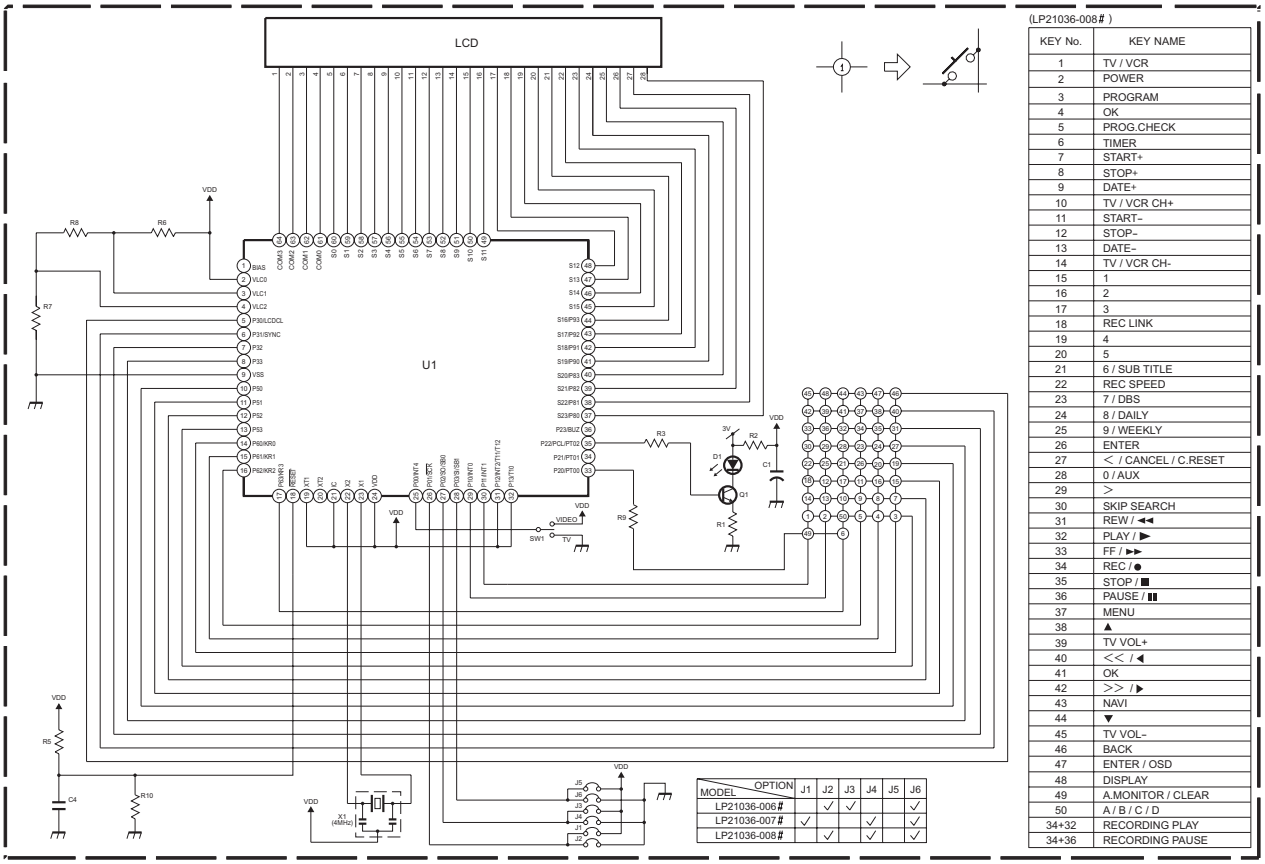
<49> DIGITAL SUB
LPB20039-001A



N	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
IC	R1166	A C 9D	R1710	B C 2F	RA524	B C 7F
iE	R1167	A C 8D	R1713	B C 1E	RA701	B C 5E
iE	R1168	A C 9D	R1714	B C 1E	RA702	B C 5D
iD	R1169	A C 8D	R1715	B C 2G	RA703	B C 5D
iD	R1170	A C 9E	R1716	B C 2F	RA704	B C 5D
IC	R1171	A C 9E	R1717	B C 2F	RA705	B C 5F
2E	R1172	A C 9E	R1718	B C 2F	RA706	B C 5E
2E	R1173	A C 9E	R1719	B C 2G	RA707	B C 5E
3E	R1174	A C 9E	R1720	B C 2G	RA708	B C 5E
3F	R1175	A C 9E	R1721	B C 2G	RA713	B C 3D
3F	R1176	A C 9E	R1722	B C 2F	RA714	B C 3D
3F	R1177	A C 8E	R1723	B C 2F	RA715	B C 3D
IC	R1178	A C 8E	R1724	B C 2F	RA717	A C 4F
iH	R1179	A C 9E	R1725	B C 2F	RA718	A C 4F
iH	R1180	A C 9D	R1726	A C 3F	RA719	A C 4E
iG	R1181	A C 9D	R1901	A C 9F	RA720	A C 4E
iG	R1182	A C 9E	R1902	A C 10F	RA721	A C 4E
iG	R1183	A C 9D	R1903	A C 10G	RA722	A C 4E
iG	R1184	A C 9D	R1904	A C 10H	RA723	A C 4C
iG	R1185	A C 9D	R1905	B C 10H	RA724	A C 4C
iG	R1187	B C 9A	R1906	B C 10H	RA725	B C 3F
iH	R1188	B C 9A	R1907	B C 10G	RA726	B C 3F
iH	R1189	B C 9A	R1908	B C 10G	RA727	B C 3F
iH	R1190	B C 7B	R1909	B C 10G	RA728	B C 5E
iG	R1191	B C 3B	R1910	B C 10G	RA729	B C 5D
iH	R1201	A C 2B	R1911	A C 9F	RA730	B C 5D
iH	R1202	A C 2B	R1912	A C 10F	RA731	B C 5D
iG	R1203	A C 2B	R1913	B C 10G	RA732	B C 5F
iG	R1204	A C 1C	R1914	B C 10G	RA733	B C 5E
H	R1205	A C 1C	R1915	A C 9G	RA734	B C 5E
G	R1206	A C 1C	R1916	A C 9G	RA735	B C 5E
iG	R1207	A C 1C	R1917	A C 9G	RA801	B C 4G
iG	R1208	A C 1C	R1918	A C 9G	RA802	B C 4G
iG	R1209	A C 1C	R1919	A C 9F	RA803	B C 5G
iG	R1210	A C 1C	R1920	A C 10G	RA804	B C 4G
iG	R1211	A C 1C	R1921	A C 10H	RA901	B C 2G
iG	R1212	A C 1C	R1922	B C 10H	RA902	B C 2G
iG	R1213	B C 1B	R1923	B C 10H	RA903	A C 3G
iG	R1214	A C 2C	R2001	B C 11G	RA904	A C 3G
G	R1215	A C 2C	R2002	B C 10F	RA1001	B C 8E
G	R1216	A C 2C	R2003	B C 5B	RA1002	B C 8E
G	R1217	B C 1B	R2004	B C 2H	RA1003	B C 8E
G	R1218	A C 2C			RA1004	B C 8E
G	R1219	A C 2C	**OTHER**		RA1005	B C 8D
iG	R1220	A C 2C	FL401	A C 6C	RA1006	B C 8D
iH	R1221	A C 2C	FL402	A C 5B	RA1007	B C 9D
iG	R1222	A C 3C	J902	A D 1G	RA1008	B C 9D
iG	R1223	A C 3C	J1701	A C 1F	RA1009	B C 9C
iG	R1224	A C 3C	K1	A C 2B	RA1010	B C 9C
iG	R1225	A C 3C	K2	A C 5G	RA1701	A C 2F
H	R1226	A C 2B	K202	A C 9G	RA1702	A C 2F
H	R1227	A C 2C	K203	A C 8H	RA1703	A C 3F
H	R1228	A C 2C	K204	A C 9F	RA1704	A C 3F
H	R1229	A C 2C	K205	A C 9F	RA1705	A C 3F
1H	R1230	A C 2C	K206	A C 9F	RA1706	A C 2E
1E	R1301	A C 7B	K207	A C 9F	RA1901	B C 7E
1E	R1302	A C 7B	K208	A C 9G	RA1902	B C 7E
1E	R1303	A C 7B	K209	A C 9G	RA1903	B C 7E
1E	R1304	A C 8B	K210	A C 8G	RA1904	B C 7E
1E	R1305	A C 7C	K211	B C 10F	RA1905	B C 7F
1E	R1306	A C 7C	K213	A C 8G	RA1906	A C 9G
1E	R1307	A C 8C	K214	A C 8G	RA1907	A C 9H
1E	R1308	A C 8C	K215	A C 9G	RA1908	A C 9H
1E	R1309	A C 8C	K501	A C 7D	RA1909	A C 9G
1E	R1310	A C 8C	K503	A C 7D	TM1	A C 1A
1E	R1311	A C 8C	K504	A C 7D	TM2	A C 1A
1E	R1312	A C 9C	K506	A C 6E	TM3	A C 10H
1E	R1313	A C 8B	K509	A C 6D	TM4	A C 10H
1E	R1314	A C 7B	K510	A C 6D	TM5	A C 1H
1E	R1315	A C 7B	K512	A C 7E	TM6	A C 1H
1E	R1316	A C 7B	K513	A C 7D	TM7	A C 10A
1D	R1317	A C 8B	K514	A C 7D	TM8	A C 10A
1E	R1318	A C 7B	K515	A C 7E	X1	A C 7H
1D	R1319	A C 7B	K516	A C 6E	X201	A C 7H
1D	R1320	A C 7B	K517	A C 8E	X202	A C 8F
1D	R1321	A C 9B	K802	B C 3H	X901	A C 3H
IC	R1322	A C 8B	K903	B C 2H	X1201	A C 2D
IC	R1323	A C 9B	K1001	A C 7D		
1D	R1324	A C 8B	K1002	B C 10D		
1D	R1325	A C 9B	K1003	A C 8F		
1D	R1326	A C 8B	K1201	A C 2B		
1E	R1327	A C 9B	K1701	A C 2G		
1E	R1328	A C 8B	K1702	A C 2E		
1E	R1329	B C 8B	K1901	B C 10G		
1E	R1330	B C 8B	LC1	B C 10B		
1E	R1331	A C 9B	LC2	B C 10B		
1E	R1332	B C 9A	LC3	B C 10B		
1E	R1333	A C 9C	LC4	B C 10E		
1E	R1334	A C 8B	LC5	B C 10D		
1D	R1335	A C 9B	LC6	B C 10D		
1A	R1336	A C 8B	LC7	B C 10C		
1A	R1337	A C 9B	LC8	B C 10C		
1A	R1338	A C 8B	RA1	A C 7H		
IC	R1339	A C 7C	RA2	A C 7H		
IC	R1342	A C 8C	RA3	A C 7G		
IC	R1343	A C 7C	RA4	A C 7G		
IC	R1346	A C 7C	RA203	B C 9F		
IC	R1347	A C 7C	RA204	B C 9F		
1B	R1348	A C 8C	RA205	B C 9F		
3B	R1349	A C 9B	RA206	B C 9G		
1E	R1350	A C 8B	RA213	B C 7H		
1E	R1351	B C 8B	RA214	B C 7G		
1D	R1352	B C 8B	RA215	B C 8F		
1E	R1353	A C 1D	RA501	A C 7E		
1D	R1354	A C 1D	RA502	A C 7E		
1D	R1501	B C 6F	RA503	A C 7E		
1E	R1502	B C 6G	RA504	A C 7E		
1D	R1503	B C 6G	RA505	A C 7E		
1E	R1504	B C 5G	RA513	B C 7F		
1E	R1701	A C 3F	RA514	B C 7F		
1E	R1702	A C 2E	RA517	B C 6F		
1E	R1703	A C 2E	RA518	B C 6F		
IC	R1704	A C 2E	RA519	B C 6F		
IC	R1705	A C 2E	RA520	B C 6F		
1D	R1706	A C 2E	RA521	B C 7F		
1D	R1709	A C 2E	RA523	B C 7F		

■ REMOTE CONTROLLER SCHEMATIC DIAGRAM

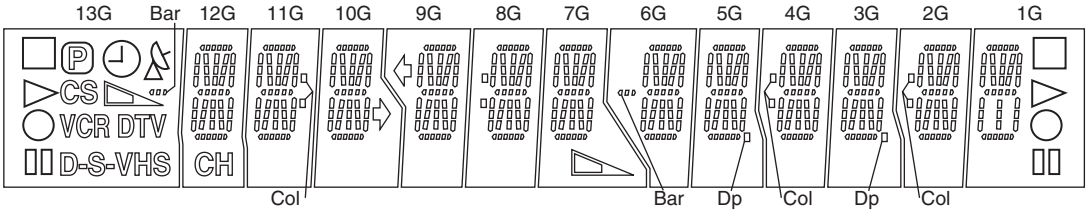
NOTE :
1. All parts shown in this schematic are ciritical for sefety.
2. This schematic is only for reference.
   Avoid replacing individual parts.
   Replace the entire unite only.



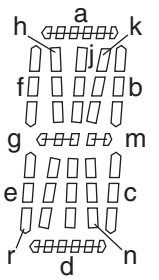
(LP21036-008#)

KEY No.	KEY NAME
1	TV / VCR
2	POWER
3	PROGRAM
4	OK
5	PROG.CHECK
6	TIMER
7	START+
8	STOP+
9	DATE+
10	TV / VCR CH+
11	START–
12	STOP–
13	DATE–
14	TV / VCR CH-
15	1
16	2
17	3
18	REC LINK
19	4
20	5
21	6 / SUB TITLE
22	REC SPEED
23	7 / DBS
24	8 / DAILY
25	9 / WEEKLY
26	ENTER
27	< / CANCEL / C.RESET
28	0 / AUX
29	>
30	SKIP SEARCH
31	REW / ◄◄
32	PLAY / ►
33	FF / ►►
34	REC / ●
35	STOP / ■
36	PAUSE / ▮▮
37	MENU
38	▲
39	TV VOL+
40	<< / ◄
41	OK
42	>> / ►
43	NAVI
44	▼
45	TV VOL–
46	BACK
47	ENTER / OSD
48	DISPLAY
49	A.MONITOR / CLEAR
50	A / B / C / D
34+32	RECORDING PLAY
34+36	RECORDING PAUSE

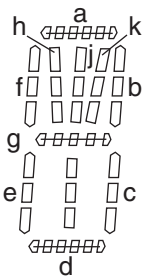
■ FDP GRID ASSIGNMENT AND ANODE CONNECTION



	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	□	a	a	a	a	a	a	a	a	a	a	a	a
P2	Ⓟ	b	b	b	b	b	b	b	b	b	b	b	b
P3	🕘	f	f	f	f	f	f	f	f	f	f	f	f
P4	🔔	h	h	h	h	h	h	h	h	h	h	h	h
P5	◺	j	j	j	j	j	j	j	j	j	j	j	j
P6	CS	k	k	k	k	k	k	k	k	k	k	k	k
P7	Bar	CH	Col	⇧	⇩	Col	◺	Col	Dp	Col	Dp	Col	□
P8	◺	g	g	g	g	g	g	g	g	g	g	g	g
P9	○	m	m	m	m	m	m	m	m	m	m	m	◺
P10	VCR	c	c	c	c	c	c	c	c	c	c	c	c
P11	DTV	e	e	e	e	e	e	e	e	e	e	e	e
P12	▯▯	r	r	r	r	r	r	r	r	r	r	r	○
P13	D-	p	p	p	p	p	p	p	p	p	p	p	p
P14	S-	n	n	n	n	n	n	n	n	n	n	n	▯▯
P15	VHS	d	d	d	d	d	d	d	d	d	d	d	d

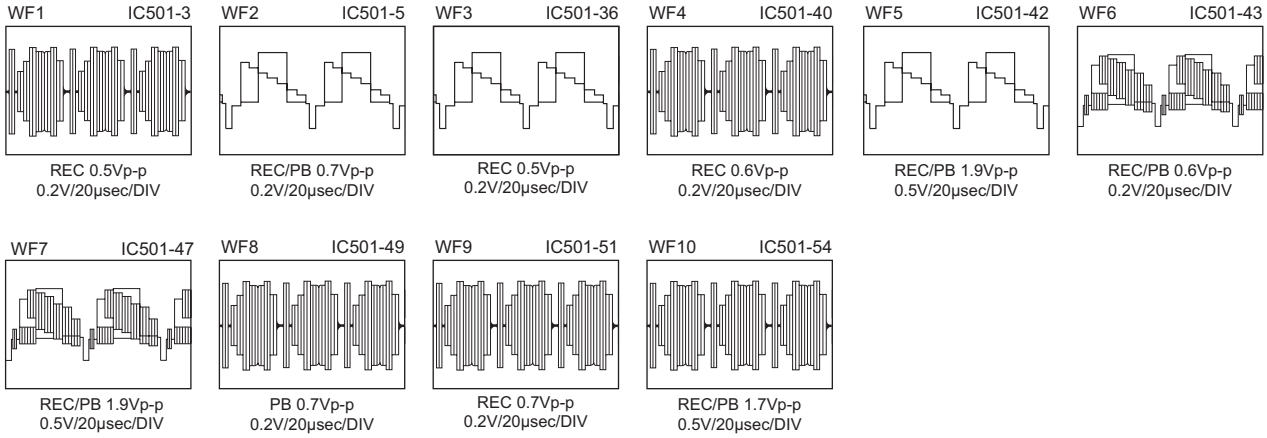


(2G-12G)

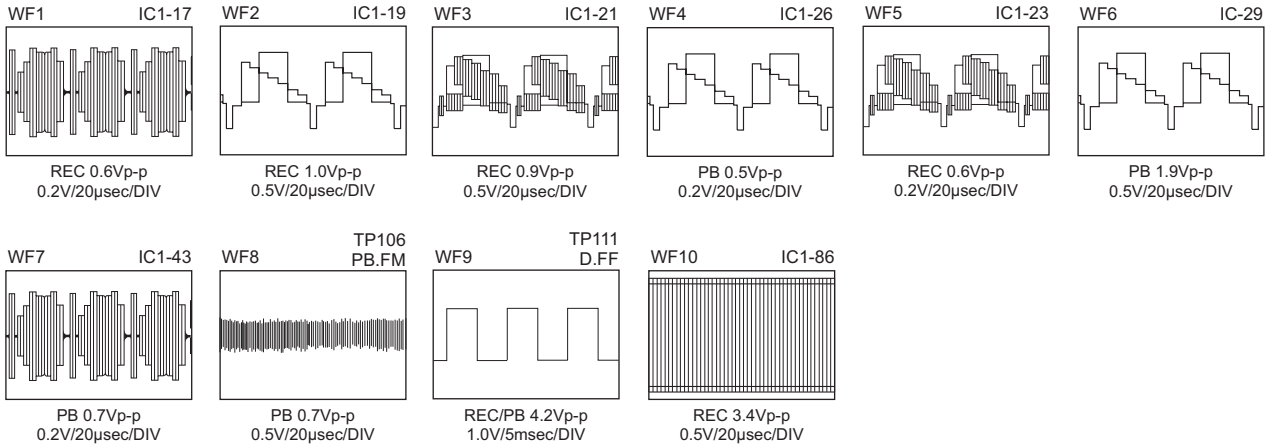


(2G-12G)

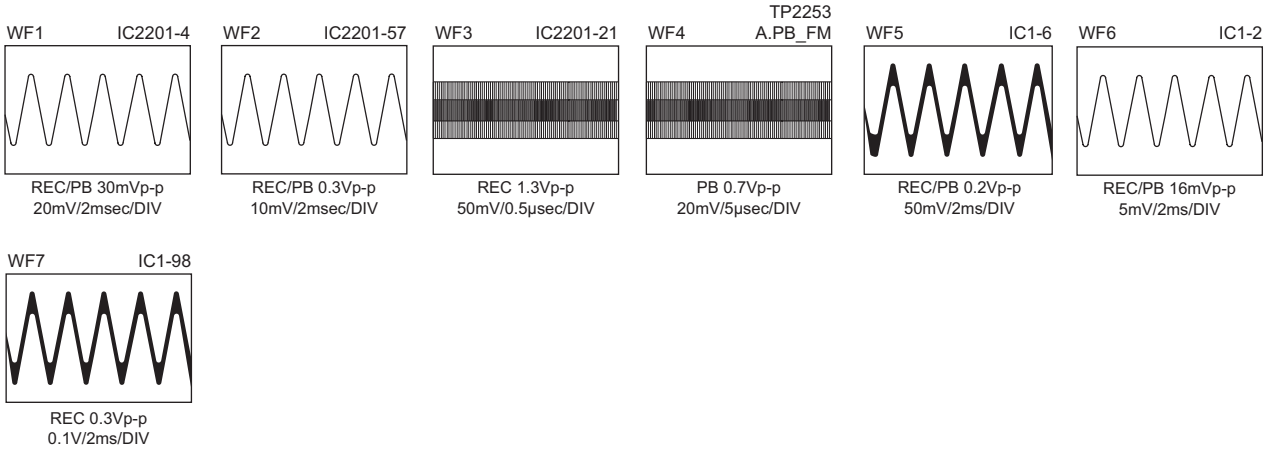
<VIDEO BLOCK DIAGRAM(1)>



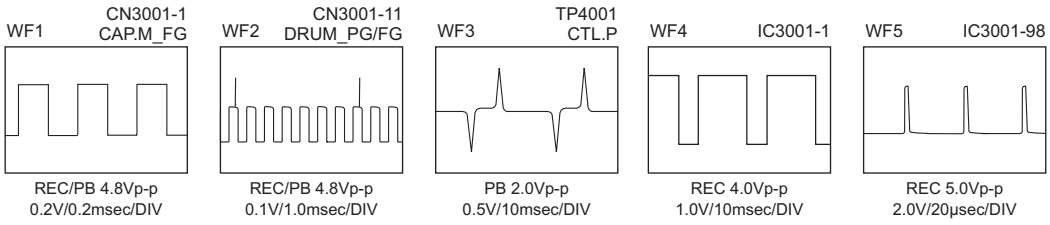
<VIDEO BLOCK DIAGRAM(2)>



<AUDIO BLOCK DIAGRAM>



<SYSTEM CONTROL BLOCK DIAGRAM>



■ VOLTAGE CHARTS

<SWITCHING REGULATOR>

MODE PIN NO.	REC	PLAY
IC5101		
1	131.5	131.3
2	0	0
3	0	0
4	17.1	16.9
5	2.1	2.1
IC5301		
1	2.3	2.4
2	0	0
3	4.8	4.8
Q5301		
E	27.6	27.5
C	31.0	30.7
B	28.1	28.1
Q5302		
E	52.1	51.6
C	52.1	51.5
B	0	0
Q5303		
E	31.9	32.2
C	31.9	32.2
B	31.2	31.6
Q5304		
1	0	0
2	4.1	4.2
3	28.2	28.0
4	28.2	28.0
5	0	0
6	0	0
Q5305		
E	10.6	10.6
C	12.3	12.2
B	11.2	11.2
Q5306		
E	5.1	5.1
C	5.8	5.8
B	5.8	5.8
Q5307		
E	11.3	11.2
C	11.3	11.2
B	10.5	10.5
Q5308		
E	0	0
C	0	0
B	2.9	2.9
Q5311		
E	5.0	5.1
C	5.8	5.8
B	5.7	5.7
Q5312		
E	12.0	12.0
C	21.4	21.7
B	12.5	12.6
Q5313		
1	0	0
2	4.9	4.9
3	27.4	27.6
4	27.5	27.6
5	0	0
6	0	0
CN5301		
1	5.0	5.1
2	10.6	10.6
3	31.8	32.2
4	52.1	51.6
5	2.9	2.9
6	-7.2	-7.2
7	0	0
8	0	0
9	2.4	2.4
10	5.8	5.8
11	4.2	4.2
12	12.3	12.2
13	0	0
14	27.6	27.5
15	0	0
CN5302		
1	11.2	11.2
2	0	0
CN5303		
1	10.6	10.6
2	0	0
3	5.1	5.1
4	-7.2	-7.2
CN5304		
1	0	0
2	5.9	5.9
3	12.3	12.2
4	0	0
5	2.4	2.4
6	5.9	5.9
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	4.1	4.1
13	-30.8	-30.5
14	-21.7	-21.5
15	-17.1	-16.9

<JUNCTION>

MODE PIN NO.	REC	PLAY
IC5501		
1	0	0
2	6.1	6.1
3	2.4	2.4
4	0	0
5	3.4	3.4
6	1.0	1.0
7	0	0
8	6.2	6.1
9	3.2	3.2
10	-	-
11	0	0
12	0	0
13	1.0	1.0
14	2.7	2.6
15	2.6	2.6
16	4.9	4.9
IC5502		
1	0	0
2	5.7	5.6
3	2.8	2.7
4	0	0
5	2.5	2.5
6	0.9	0.9
7	0	0
8	5.6	5.7
9	3.2	3.1
10	-	-
11	0	0
12	0	0
13	0.9	0.9
14	1.9	1.9
15	1.9	1.9
16	2.4	2.4
IC5503		
1	12.3	12.2
2	12.3	12.2
3	12.3	12.2
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	3.4	3.4
11	3.4	3.4
12	3.4	3.4
13	3.4	3.4
14	3.4	3.4
15	-	-
16	0	0
17	0	0
18	0	0
IC5504		
1	5.0	5.0
2	0	0
3	0	0
4	3.4	3.3
5	2.4	2.4
6	0	0
7	5.8	5.8
Q5501		
E	0	0
C	0	0
B	2.4	2.4
Q5502		
1	0	0
2	2.4	2.4
3	5.7	5.7
4	5.9	5.8
5	0.1	0
6	0	0
Q5503		
E	-17.2	-17.0
C	-17.1	-16.9
B	-16.4	-16.2
CN5501		
1	0	0
2	5.9	5.9
3	12.3	12.2
4	0	0
5	2.4	2.4
6	5.9	5.9
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	4.1	4.1
13	-30.8	-30.5
14	-21.7	-21.5
15	-17.1	-16.9
CN5502		
1	3.4	3.4
2	3.3	3.4
3	3.5	3.4
4	0	0
5	0	0
CN5503		
1	0	0
2	0	0
3	2.6	2.6
4	2.6	2.6
5	0	0
6	0	0
7	5.0	5.0
8	12.0	12.0
CN5504		
1	3.4	3.4
2	3.4	3.4
3	1.8	1.9
4	1.9	1.9
5	5.0	5.0
6	5.8	5.8
7	0	0
8	0	0
9	0	0
10	0	0
11	2.5	2.5
12	2.5	2.5
CN5505		
1	-21.8	-21.5
2	-30.8	-30.5
3	-17.2	-17.0
4	0	0
CN5506		
1	4.9	4.9
2	4.9	4.9

<MAIN>

MODE PIN NO.	REC	PLAY
IC1		
1	0	0
2	0	0
3	0	0
4	4.4	4.4
5	1.9	2.0
6	2.6	2.5
7	2.8	2.8
8	1.8	1.4
9	1.8	1.3
10	2.4	1.8
11	2.6	3.0
12	1.6	0.6
13	0	0
14	2.7	2.2
15	2.8	2.8
16	0	0.4
17	2.8	2.8
18	1.9	1.9
19	2.8	2.8
20	0	0
21	2.8	2.8
22	5.1	5.0
23	2.3	2.3
24	3.0	2.8
25	0	0
26	3.0	2.8
27	1.5	1.6
28	0	0
29	1.9	2.4
30	2.9	2.8
31	0.4	0.3
32	2.3	2.7
33	2.1	2.1
34	3.0	3.0
35	3.0	3.0
36	2.3	2.3
37	3.1	3.0
38	2.1	2.2
39	1.4	1.4
40	2.1	2.1
41	2.5	2.7
42	1.9	2.0
43	2.1	2.1
44	0	0
45	3.2	3.2
46	3.2	3.2
47	5.0	5.1
48	5.0	5.0
49	3.3	3.3
50	5.1	5.1
51	2.0	2.1
52	5.1	5.0
53	2.6	2.6
54	0	0
55	2.1	2.1
56	0	0
57	2.1	2.1
58	2.3	2.3
59	5.1	5.0
60	5.0	5.1
61	0	0
62	2.2	2.3
63	2.1	2.1
64	2.7	2.7
65	2.2	2.2
66	2.7	2.7
67	2.2	2.2
68	1.2	1.2
69	1.9	1.9
70	2.7	2.0
71	0.4	0.3
72	5.0	5.0
73	4.9	4.8
74	4.8	4.8
75	2.8	2.7
76	2.2	2.1
77	2.8	2.8
78	0	0
79	0.5	2.6
80	2.5	2.5
81	0	0
82	0	0
83	0	3.6
84	5.0	5.0
85	2.5	2.3
86	2.3	2.2
87	2.5	2.3
88	0	0
89	0	0
90	0	0
91	0	0
92	5.1	5.0
93	1.5	0.2
94	0	2.3
95	2.5	2.5
96	2.5	2.4
97	0	0
98	2.4	2.6
99	0	0
100	2.5	2.5
IC501		
1	0.5	2.9
2	5.0	5.1
3	2.8	2.8
4	0	0
5	3.3	3.0
6	5.1	5.1
7	2.8	2.8
8	0.6	2.2
9	4.8	4.8
10	4.8	4.9
11	5.0	5.1
12	1.9	2.0
13	2.8	2.8
14	2.4	2.4
15	1.1	0
16	2.4	1.4
17	2.8	2.7
18	0.6	0.2
19	0	0
20	2.9	2.1
21	0	0
22	0	0
23	0	0
24	2.3	2.3
25	0	0
26	2.3	2.4
27	2.3	2.3
28	2.3	2.4
29	2.3	2.4
30	3.6	3.6
31	2.3	2.4
32	2.3	2.4
33	3.4	3.4
34	5.1	5.1
35	0	0
36	2.4	2.1
37	2.6	2.5
38	2.7	2.7
39	2.8	2.8
40	2.9	2.9
41	1.5	1.6
42	0	2.4
43	2.3	2.3
44	2.3	2.6
45	2.9	3.1
46	4.3	4.3
47	2.4	2.3
48	0	0
49	2.8	2.9
50	4.3	4.4
51	2.8	2.8
52	0	0
53	0	4.3
54	0.8	2.7
55	0	0
56	2.8	2.8
IC2201		
1	2.4	2.4
2	0	0
3	2.4	2.4
4	0	0
5	2.4	2.4
6	2.5	2.5
7	2.0	2.0
8	0.7	0.4
9	0	0
10	0	0
11	0	0
12	2.0	2.0
13	2.4	2.6
14	0	0
15	0	0
16	2.6	2.6
17	0.8	0.9
18	2.5	2.5
19	2.5	2.5
20	2.0	0
21	2.0	0
22	2.0	0.6
23	0	0
24	2.1	0.6
25	5.0	5.0
26	2.1	0
27	0	2.5
28	4.3	2.2
29	4.2	1.7
30	2.3	0.9
31	1.0	2.1
32	2.5	2.5
33	2.5	2.5
34	0.8	0.7
35	2.6	2.5
36	0	0
37	0	1.6
38	0	0
39	0	0
40	5.0	5.0
41	0	0
42	4.1	4.7
43	3.8	4.5
44	2.4	2.3
45	0	0
46	3.6	3.5
47	3.0	2.4
48	2.2	2.2
49	2.7	3.6
50	3.0	3.5
51	5.1	5.1
52	2.6	3.5
53	4.3	4.3
54	2.3	2.4
55	0	0
56	2.1	0
57	4.5	4.4
58	8.8	8.7
59	4.5	4.5
60	0	0
61	2.5	0
62	2.4	2.4
63	0	0
64	0.8	0.5
IC2601		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	-5.9	-5.9
8	0	0
9	0	0
10	5.0	5.1
11	5.0	5.0
12	0	0
13	0	0
14	0	0
15	0	0
16	4.8	4.8
IC2602		
1	0	0
2	0	0
3	0	0
4	-5.9	-5.9
5	0	0
6	0	0
7	0	0
8	4.8	4.8
IC2621		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	-5.9	-5.9
8	0	0
9	0	0
10	5.0	5.0
11	5.0	5.0
12	0	0
13	0	0
14	0	0
15	0	0
16	4.8	4.8
IC2622		
1	0	0
2	0	0
3	0	0
4	-5.8	-5.9
5	0	0
6	0	0
7	0	0
8	4.8	4.8
IC2641		
1	0	0
2	0	0
3	0	0
4	-5.9	-5.9
5	0	0
6	0	0
7	0	0
8	4.8	4.8
IC3001		
1	2.8	2.5
2	0	0
3	-	2.5
4	2.5	2.5
5	0.2	0.2
6	2.6	2.6
7	2.5	2.5
8	2.5	2.5
9	5.1	5.0
10	5.0	5.1
11	2.1	0
12	4.3	4.8
13	0	0
14	0	0
15	0	0
16	5.0	5.0
17	0	0
18	4.3	2.3
19	0	0
20	0	3.6
21	0.7	0.7
22	0.2	0.2
23	0	0
24	5.0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	5.0	4.9
30	4.3	4.4
31	5.0	5.0
32	0.6	0.5
33	0	0
34	3.7	4.0
35	2.5	2.5
36	5.0	5.0
37	0	0
38	0	0.3
39	0	0
40	4.8	4.8
41	4.7	4.8
42	0	0
43	0	0
44	0	0
45	5.0	5.1
46	4.9	4.9
47	0.1	0
48	4.6	4.6
49	4.8	4.8
50	4.8	4.8
51	4.6	4.6
52	4.7	4.7
53	4.8	4.9
54	-	-
55	-	-
56	4.7	4.6
57	5.0	5.0
58	0	0
59	0	0
60	5.0	5.0
61	5.1	5.0
62	0	0
63	0	0
64	1.5	1.5
65	0.7	0.8
66	5.0	5.0
67	2.5	0
68	0	0
69	2.5	2.5
70	5.0	5.0
71	5.0	5.1
72	0	0
73	0	5.0
74	0	0
75	4.1	4.6
76	3.8	4.6
77	5.0	4.9
78	0	0
79	0	0
80	0	0
81	0	0
82	5.1	5.0
83	0	0
84	0	0
85	5.0	0
86	0	0
87	4.9	0
88	5.0	0
89	0	0
90	2.5	2.5
91	-	-
92	0	0.1
93	0	0
94	0	0
95	5.0	5.0
96	5.0	5.0
97	0	0
98	0.3	0.3
99	0	2.5
100	2.5	2.5
101	2.6	2.6
102	2.5	2.5
103	0	0
104	0	
105	0	
106	4.9	4.
107	0	
108	1.3	1.
109	5.0	5.
110	0	
111	0	
112	2.5	2.
IC3002		
1	5.0	5.
2	5.0	5.
3	0	
4	0	
IC3003		
1	0	
2	0	
3	0	
4	0	
5	4.9	5.
6	5.0	5.
7	0	
8	5.1	5.
IC3005		
1	0	
2	0	
3	0.1	0.
4	4.3	
5	5.0	
6	5.0	5.
7	4.2	4.
8	2.8	2.
9	4.2	4.
10	2.3	2.
11	5.0	5.
12	3.6	3.
13	5.0	5.
14	5.0	5.
15	5.0	5.
16	5.0	5.
IC3006		
1	0	0.
2	0	
3	0.1	0.
4	0	
5	0	
6	0	
7	0	
8	0.2	5.
9	0	
10	5.0	5.
11	0	
12	5.1	5.
13	0	
14	0	
15	5.0	5.
16	5.0	5.
IC7101		
1	0	
2	0	
3	0.5	
4	0.5	1.
5	0.5	
6	0	
7	-3.6	-3.
8	0	
9	0	
10	0	
11	0.6	0.
12	0	
13	0	
14	0	
15	0	
16	5.1	5.
IC7102		
1	0	
2	0	
3	0	
4	0	
5	0	
6	0	
7	-3.6	-3.
8	0	
9	0	
10	0	
11	0	
12	0	
13	0	0
14	0	
15	0	
16	5.1	5.
Q1		
E	0	
C	0	
B	4.3	4.
Q7		
E	0	

ODE N NO.	REC	PLAY
104	0	0
105	0	0
106	4.9	4.9
107	0	0
108	1.3	1.3
109	5.0	5.0
110	0	0
111	0	0
112	2.5	2.5
3002		
1	5.0	5.0
2	5.0	5.0
3	0	0
4	0	0
3003		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.9	5.0
6	5.0	5.0
7	0	0
8	5.1	5.0
3005		
1	0	0
2	0	0
3	0.1	0.1
4	4.3	0
5	5.0	0
6	5.0	5.0
7	4.2	4.2
8	2.8	2.8
9	4.2	4.1
10	2.3	2.3
11	5.0	5.1
12	3.6	3.4
13	5.0	5.0
14	5.0	5.0
15	5.0	5.0
16	5.0	5.0
3006		
1	0	0.1
2	0	0
3	0.1	0.1
4	0	0
5	0	0
6	0	0
7	0	0
8	0.2	5.4
9	0	0
10	5.0	5.1
11	0	0
12	5.1	5.0
13	0	0
14	0	0
15	5.0	5.1
16	5.0	5.1
7101		
1	0	0
2	0	0
3	0.5	0
4	0.5	1.0
5	0.5	0
6	0	0
7	-3.6	-3.5
8	0	0
9	0	0
10	0	0
11	0.6	0.6
12	0	0
13	0	0
14	0	0
15	0	0
16	5.1	5.1
7102		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	-3.6	-3.6
8	0	0
9	0	0
10	0	0
11	0	0
12	0	
13	0	00
14	0	0
15	0	0
16	5.1	5.1
Q1		
E	0	0
C	0	0
B	4.3	4.3
Q7		
E	0	0

MODE PIN NO.	REC	PLAY
C	0.5	0
B	0	0
Q8		
E	0	0
C	0.3	0
B	0	0
Q9		
E	0	0
C	0	0
B	0.7	0.8
Q10		
E	0	0
C	0	0
B	0.7	0.8
Q11		
E	5.0	5.0
C	0	0
B	5.0	5.1
Q12		
E	5.1	5.1
C	4.2	4.2
B	0.5	0.5
Q13		
E	0	0
C	0.5	0
B	0	0
Q14		
E	0	0
C	0	0
B	0.8	0.7
Q1701		
E	5.4	7.1
C	0	0
B	5.3	7.0
Q1702		
E	6.2	6.8
C	0	0
B	5.8	6.7
Q1703		
E	0	0
C	5.2	6.5
B	0	0
Q1704		
E	10.7	10.6
C	5.5	6.6
B	10.6	10.5
Q1705		
E	0	0
C	10.6	10.5
B	0	0
Q1706		
E	0	0
C	0.2	0.2
B	0	0
Q2001		
E	-10.0	0
C	0	0
B	-18.0	0.7
Q2002		
E	-10.0	0
C	0	0
B	-17.7	0.6
Q2003		
E	5.1	5.1
C	-17.8	5.0
B	4.3	0
Q2051		
E	0	0
C	7.6	0.2
B	0.4	0.2
Q2052		
E	10.5	10.6
C	10.2	0.2
B	9.8	10.5
Q2053		
E	0	0
C	0	10.5
B	4.9	0
Q2054		
E	10.2	0.2
C	9.9	0.2
B	9.5	0.2
Q2055		
E	0	0
C	0	0.2
B	4.3	0
Q2201		
E	4.8	4.8
C	-2.1	-1.5
B	4.8	4.8
Q2202		
E	0	0
C	4.8	4.8
B	0	0
Q2203		
E	-0.1	0
C	0	0

MODE PIN NO.	REC	PLAY
B	-2.0	-1.7
Q2204		
E	0	0
C	0	0
B	-2.2	-1.5
Q2251		
E	0	0
C	4.2	0
B	0	0
Q2252		
E	0	0
C	4.2	0
B	0	4.5
Q2253		
E	0	0
C	0	0
B	4.2	0
Q2254		
E	0	0
C	0	0
B	0	4.5
Q2277		
E	0	0
C	0	0
B	-0.1	-0.1
Q2278		
E	0	0
C	0.1	0
B	-0.2	-0.2
Q2279		
E	5.1	5.1
C	-0.2	-0.2
B	5.1	5.0
Q2280		
E	0	0
C	0	0
B	-0.2	0.7
Q2281		
E	5.1	4.9
C	-0.2	5.0
B	5.1	0.4
Q2282		
E	5.1	5.1
C	5.1	5.0
B	0.4	0.4
Q2283		
E	0	0
C	0	0
B	4.2	4.2
Q2284		
E	0	0
C	0	0
B	-0.1	-0.2
Q2601		
E	4.8	4.8
C	-2.4	-2.0
B	4.8	4.8
Q2602		
E	0	0
C	4.8	4.6
B	0	0
Q2603		
E	0	0
C	0	0
B	-2.4	-1.9
Q2604		
E	0	0
C	0	0
B	-2.4	-1.8
Q3002		
E	0	0
C	4.8	4.7
B	-	-
Q3003		
E	0	0
C	5.0	4.9
B	-	-
Q3004		
E	0	0
C	0	0
B	0.7	0.7
Q3005		
E	5.0	5.1
C	5.8	5.8
B	5.7	5.7
Q3011		
E	0	0
C	0	0
B	3.6	3.6
Q3012		
E	0	0
C	0	0
B	0	0
Q3013		
E	0	0
C	5.0	5.0
B	0	0

MODE PIN NO.	REC	PLAY
Q4001		
E	0	0
C	0	0
B	4.9	5.0
Q4002		
E	0	0
C	0	0
B	4.8	4.8
Q4003		
E	0	0
C	0	0
B	4.8	4.8
Q6001		
E	5.1	0
C	5.8	5.8
B	5.8	0.5
Q6002		
E	5.8	5.8
C	5.8	0.5
B	5.0	5.4
Q6030		
E	2.2	0.8
C	0	0
B	1.6	0.1
Q7151		
E	0	0
C	5.1	5.2
B	0	0
CN1		
1	0	0
2	0	0
3	0	0
4	0	0
5	0.4	0.1
6	0.2	0.1
7	0.2	0.1
8	0.1	0.2
9	0	0
10	0	0.1
11	0	0.1
CN2001		
1	0	0
2	0	0
3	0	0
4	0	0
5	2.2	2.5
6	2.4	2.5
CN2002		
1	0	0
2	0	0
CN3001		
1	2.5	2.5
2	27.6	27.4
3	5.1	5.0
4	0	0
5	10.7	10.7
6	0	0
7	0	0
8	12.6	12.5
9	2.5	2.6
10	2.5	2.4
11	1.3	1.3
12	2.5	2.6
CN3002		
1	0.1	0.1
2	5.0	5.0
3	3.8	4.1
4	4.6	4.6
5	4.9	5.0
6	5.0	5.0
7	0	0
8	5.0	5.0
9	0	0
10	0	0
CN3003		
1	0	0
2	0	0
3	0	0
4	4.7	4.6
5	0	0
6	4.8	4.8
7	4.5	4.5
8	0	0
9	-	-
10	2.5	2.5
11	2.4	2.5
12	0	2.5
13	4.6	4.6
14	5.0	5.0
15	0	0
16	5.0	5.0
CN3004		
1	-	-
2	-	-
3	0	0
4	5.0	5.0
5	4.2	4.2

MODE PIN NO.	REC	PLAY
6	0.4	0.4
7	0.3	0.4
8	2.5	2.5
9	0.5	0.8
10	4.7	4.8
11	0	0
12	5.1	5.1
13	4.5	4.5
14	0	0
15	0	2.5
16	0	0
CN3011		
1	5.1	5.1
2	10.6	10.6
3	32.4	32.6
4	55.1	54.7
5	2.8	2.8
6	-7.2	-7.2
7	0	0
8	0	0
9	2.3	2.3
10	5.8	5.8
11	4.2	4.2
12	12.6	12.5
13	0	0
14	27.7	27.7
15	0	0
CN3101		
1	4.9	4.9
2	4.9	4.9
CN3104		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	5.0	5.0
11	5.1	5.0
12	5.0	5.0
13	0	0
CN3901		
1	0	0
2	5.1	5.0
3	0	0.2
4	5.1	5.0
5	0.1	0
6	4.9	5.0
CN7107		
1	1.0	1.0
2	0	0
3	0.6	0.6
4	0	0
5	2.8	2.8
6	0	0
7	1.1	0.8
8	0	0
9	0.7	2.7
10	0.1	0
11	2.4	2.3
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
CN7111		
1	2.0	2.0
2	0	0
3	2.5	2.5
4	0	0
5	2.4	2.5
6	0	0
7	2.5	2.4
8	0	0
9	2.1	2.1
10	0	0
11	2.1	2.1
TU6001		
1	0	0
2	4.5	0
3	5.1	00
4	0	0
5	0	0
6	-	-
7	1.8	0
8	0	0
9	0	0

MODE PIN NO.	REC	PLAY
10	4.0	4.7
11	3.8	4.6
12	2.0	0
13	2.9	0
14	2.4	0
15	32.3	32.6
16	0	0
17	1.6	0.1
JS3001		
1	0	0
2	0	0
3	5.0	5.1
4	0	0
5	5.0	5.1

<OPERATION/JACK>

MODE PIN NO.	REC	PLAY
CN7201		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	5.0	5.1
11	5.0	5.1
12	5.0	5.1
13	0	0
CN7202		
1	0	0
2	2.9	2.5
3	2.0	2.4
4	0	0
5	0	0

<SWITCH/DISPLAY>

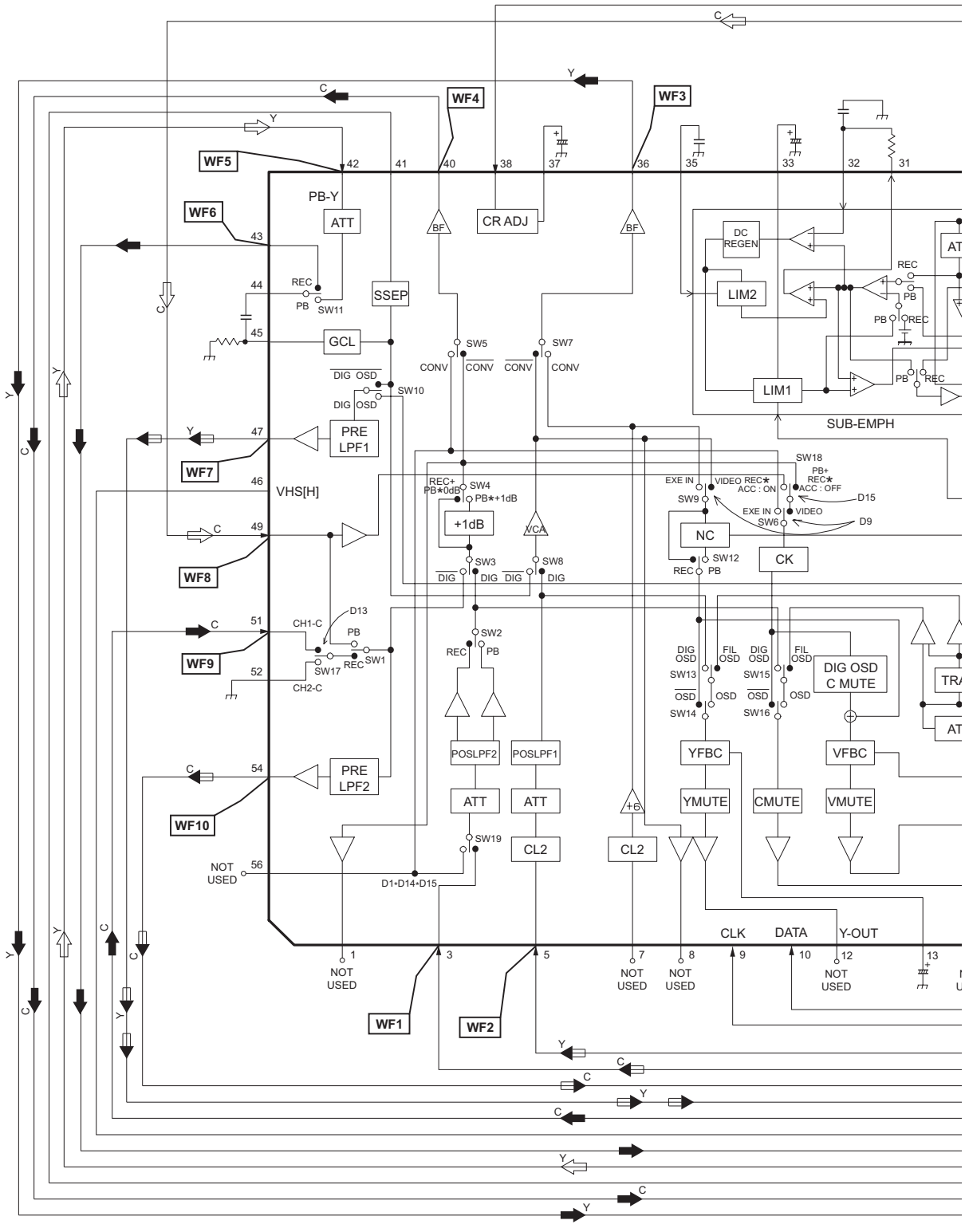
MODE PIN NO.	REC	PLAY
IC7001		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.9	5.0
6	0.1	0.1
7	5.0	5.1
8	4.6	4.6
9	3.7	4.6
10	0	0
11	0.2	0.1
12	0	0
13	0	0
14	5.0	5.0
15	-14.9	-14.6
16	-315	-31.4
17	-31.5	-31.4
18	-31.5	-31.4
19	-22.0	-24.4
20	-24.4	-26.7
21	-31.1	-31.0
22	-31.5	-29.1
23	-29.2	-29.1
24	-19.8	-22.0
25	-15.0	-17.4
26	-12.8	-19.7
27	-19.9	-19.9
28	-15.3	-24.6
29	-17.6	-24.5
30	-29.5	-29.3
31	-29.5	-29.3
32	-29.5	-29.3
33	5.0	5.1
34	-32.0	-31.9
35	-29.5	-29.2
36	-29.5	-29.2
37	-29.5	-29.2
38	-29.5	-29.2
39	-29.5	-29.2
40	-29.5	-29.2
41	-29.5	-29.2
42	-29.5	-29.2
43	-29.5	-29.2
44	-29.5	-29.2
45	5.0	5.1
46	5.0	5.1
47	5.0	5.0
48	5.0	5.1
49	5.0	5.1
50	5.1	5.0
51	0	0
52	2.7	2.8
IC7002		
1	5.0	5.0
2	5.0	5.0
3	0	0
CN7001		
1	0	0
2	0	0
3	5.0	5.0
4	0	0
5	5.0	5.0
6	4.8	5.0
7	4.6	4.6
8	3.7	4.1
9	5.0	5.0
10	0.1	0.1
CN7002		
1	0	0
2	-18.3	-18.2
3	-32.0	-31.9
4	-23.0	-22.8
FW7001		
1	0	0
2	2.9	2.5
3	2.0	2.4
4	0	0
5	0	

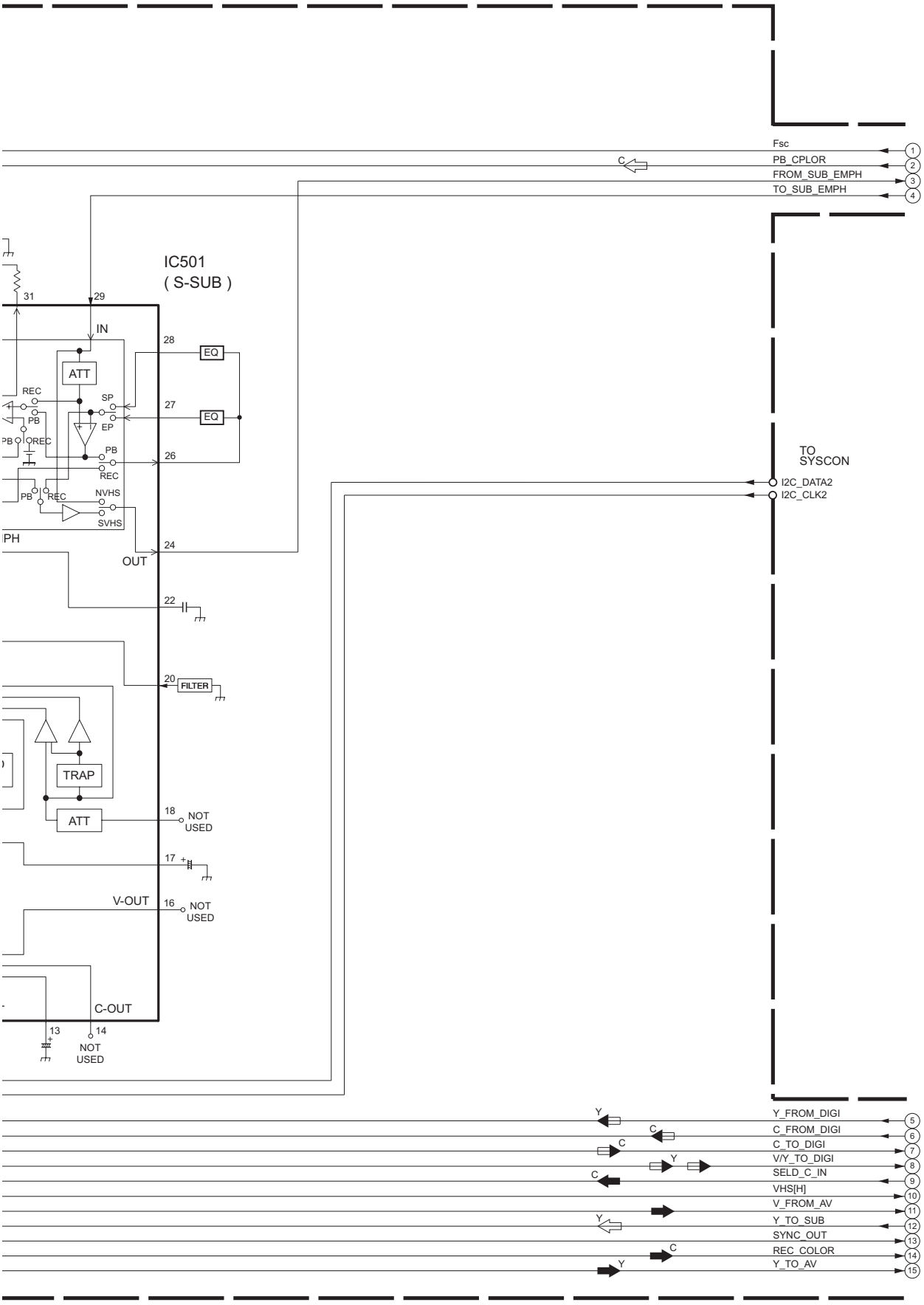
<JACK>

MODE PIN NO.	REC	PLAY
CN4106		
1	3.3	3.3
2	3.3	3.3
3	0	0
4	0	0
5	0	0
6	0	0

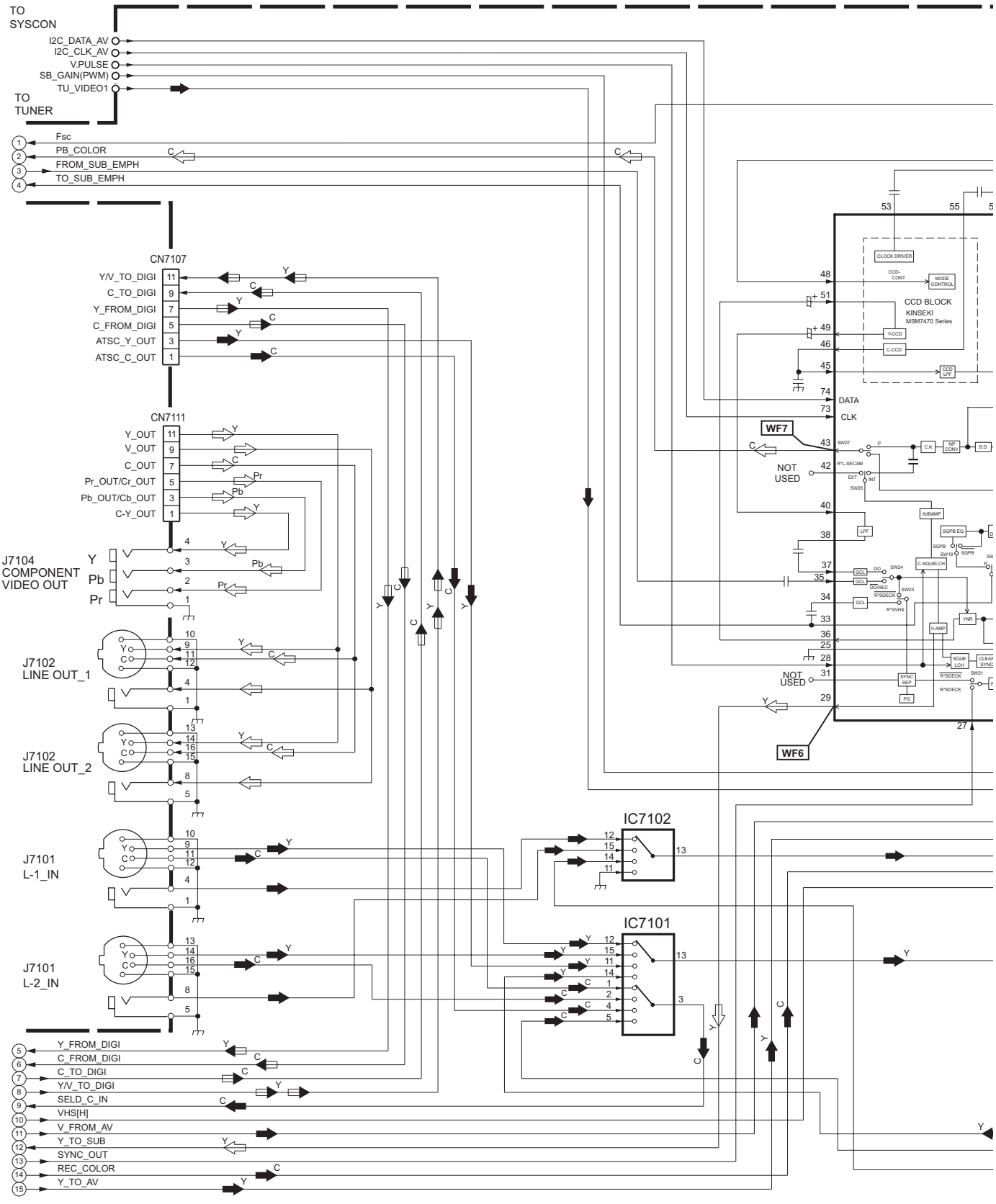
■ VIDEO BLOCK DIAGRAM (1)

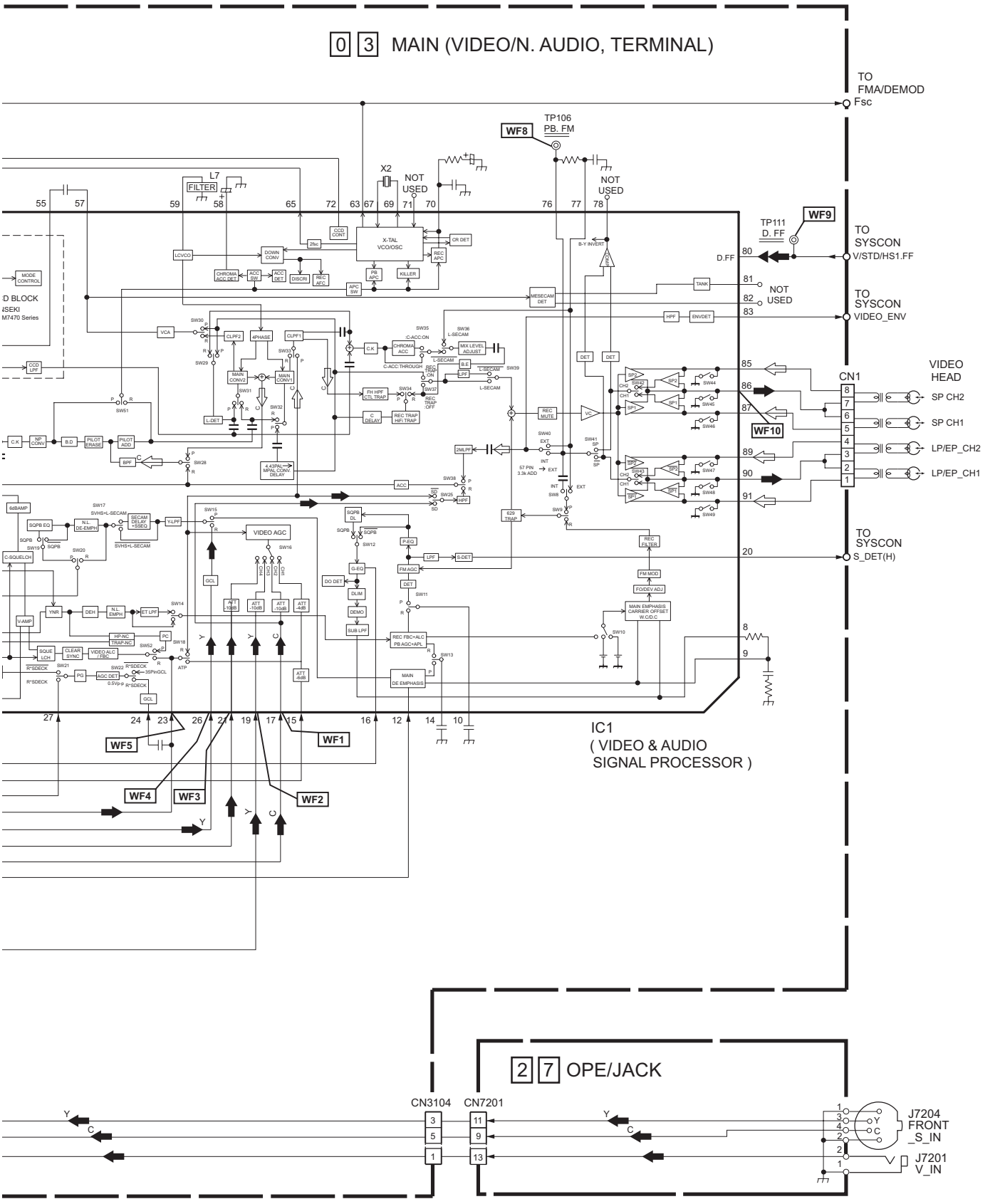
0 3 MAIN (S-SUB)



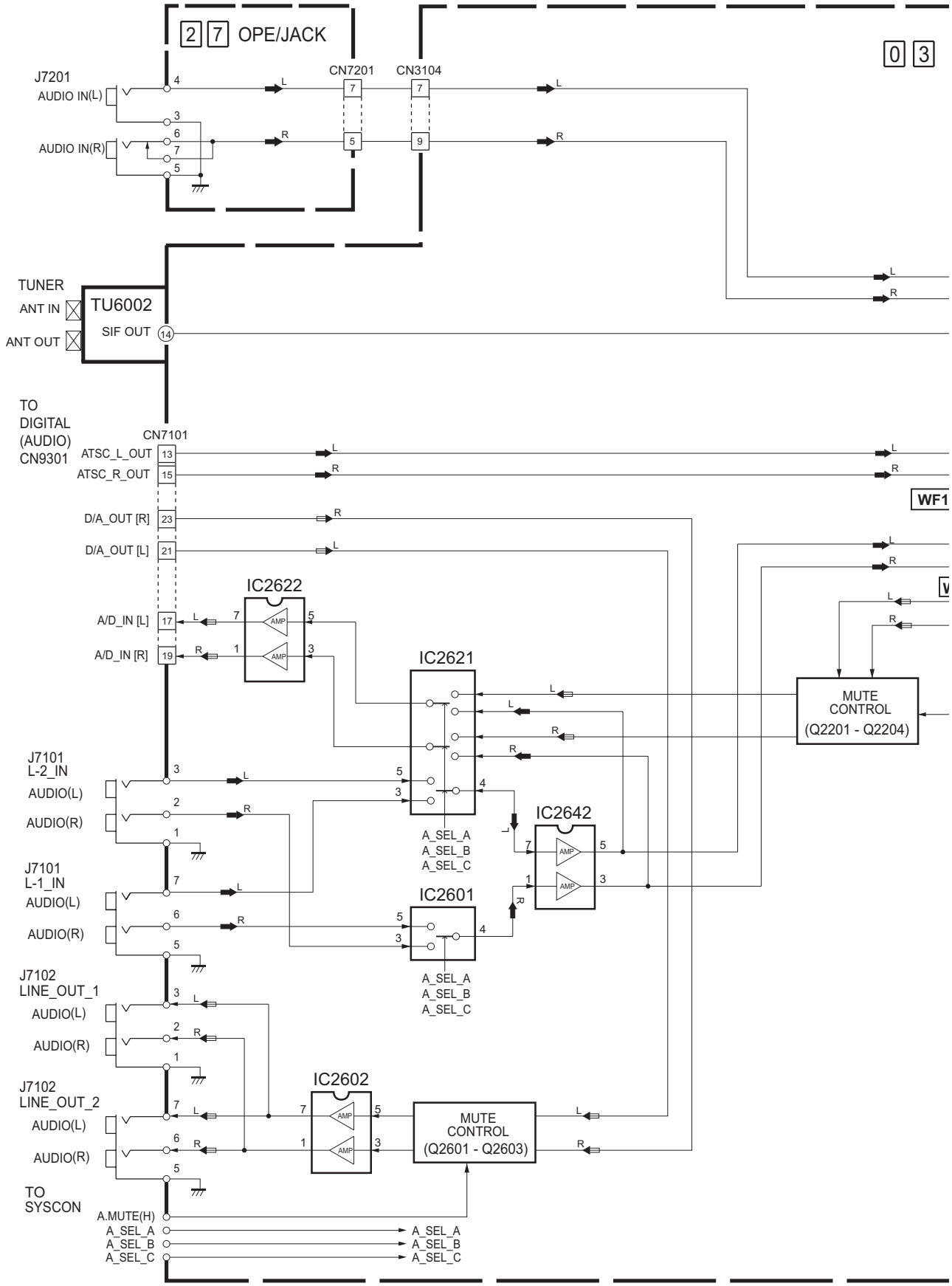

IC501
(S-SUB)
31
29
IN
28
EQ
ATT
REC
SP
27
EQ
PB
EP
PB
REC
PB
26
REC
PB
REC
NVHS
SVHS
PH
24
OUT
22
20
FILTER
TRAP
ATT
18
NOT
USED
17
V-OUT
16
NOT
USED
C-OUT
13
14
NOT
USED
Fsc
PB_CPLOR
FROM_SUB_EMPH
TO_SUB_EMPH
TO
SYSCON
I2C_DATA2
I2C_CLK2
Y_FROM_DIGI
C_FROM_DIGI
C_TO_DIGI
V/Y_TO_DIGI
SELD_C_IN
VHS[H]
V_FROM_AV
Y_TO_SUB
SYNC_OUT
REC_COLOR
Y_TO_AV

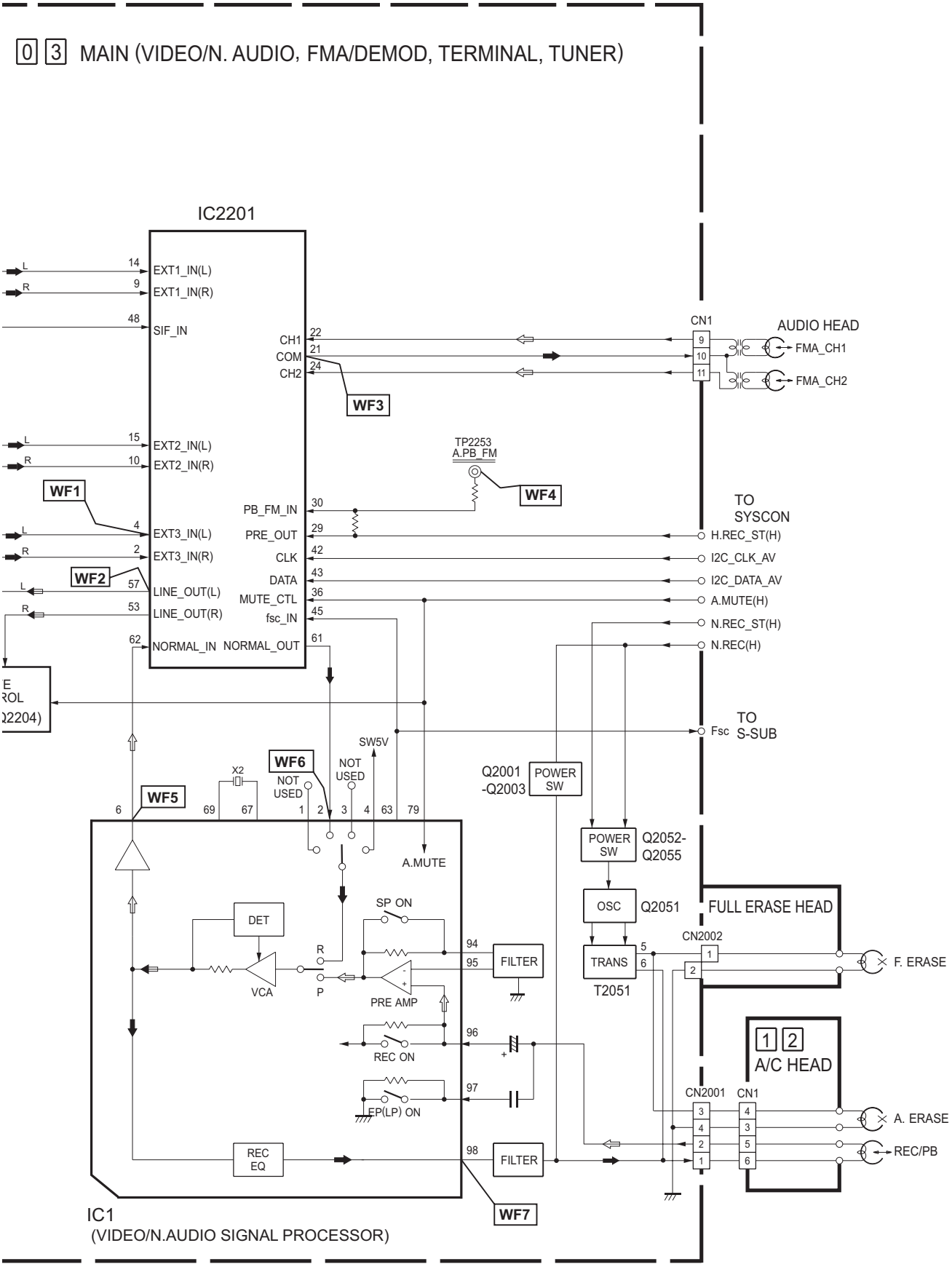
■ VIDEO BLOCK DIAGRAM (2)



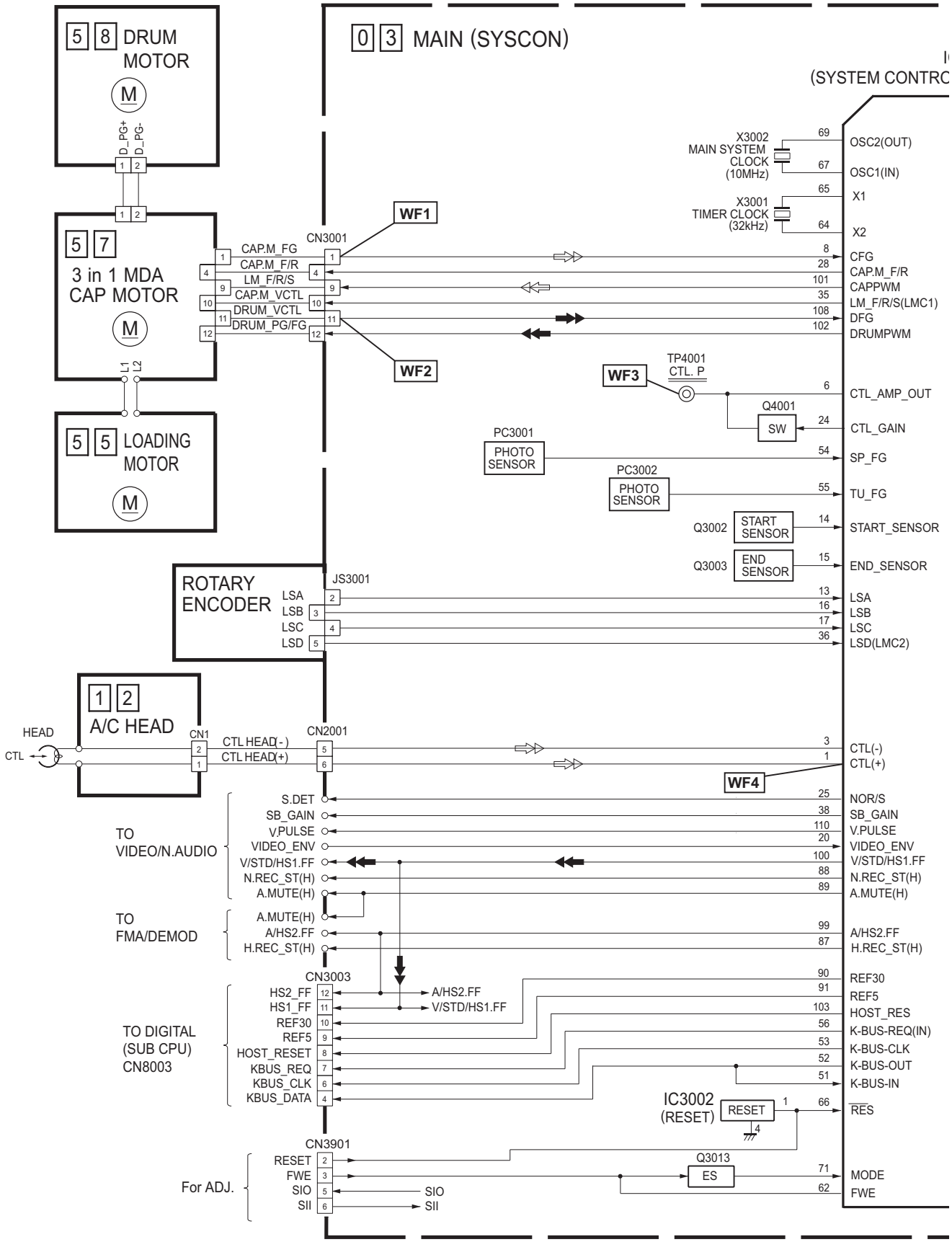

0 3 MAIN (VIDEO/N. AUDIO, TERMINAL)
TO FMA/DEMOD Fsc
TP106 PB. FM
WF8
X2
NOT USED
L7
FILTER
TP111 D. FF
WF9
TO SYSCON V/STD/HS1.FF
D.FF
NOT USED
TO SYSCON VIDEO_ENV
VIDEO HEAD
CN1
SP CH2
SP CH1
LP/EP_CH2
LP/EP_CH1
WF10
TO SYSCON S_DET(H)
IC1
(VIDEO & AUDIO SIGNAL PROCESSOR)
WF5
WF4
WF3
WF2
WF1
2 7 OPE/JACK
CN3104
CN7201
J7204 FRONT _S_IN
J7201 V_IN

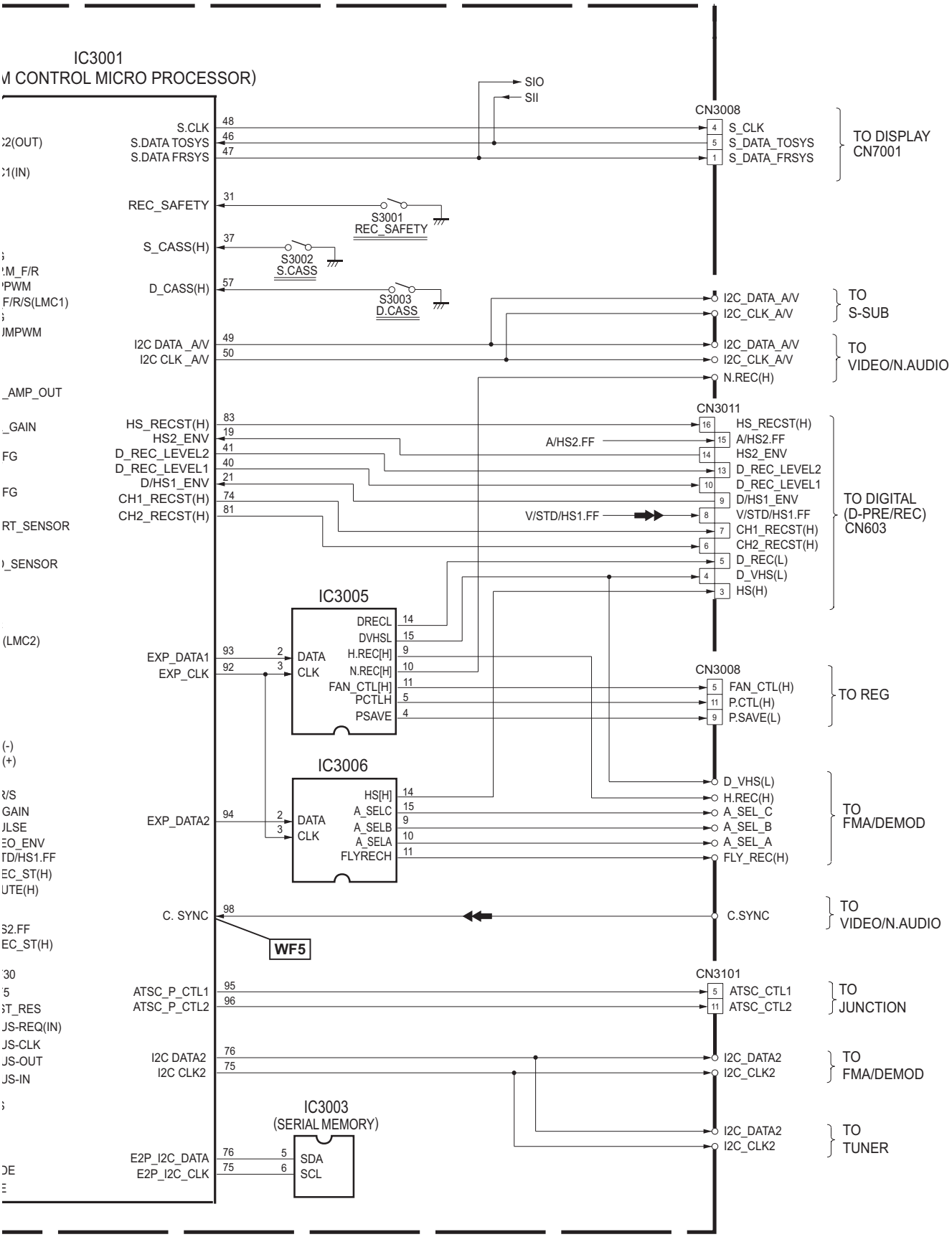
■ AUDIO BLOCK DIAGRAM



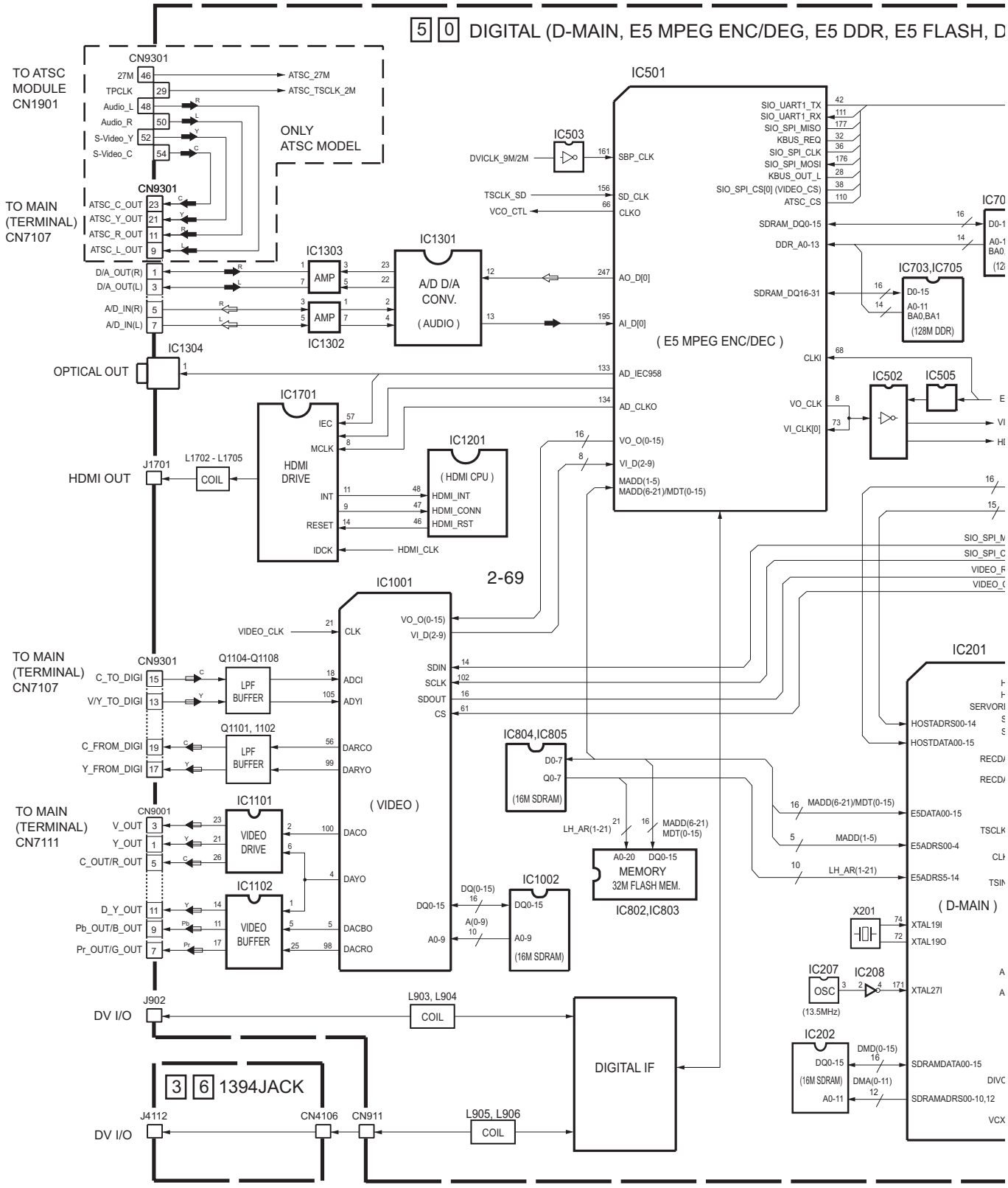

0 3 MAIN (VIDEO/N. AUDIO, FMA/DEMOD, TERMINAL, TUNER)
IC2201
EXT1_IN(L)
EXT1_IN(R)
SIF_IN
CH1
COM
CH2
WF3
CN1
AUDIO HEAD
FMA_CH1
FMA_CH2
EXT2_IN(L)
EXT2_IN(R)
TP2253
A.PB_FM
WF4
WF1
PB_FM_IN
EXT3_IN(L)
PRE_OUT
EXT3_IN(R)
CLK
WF2
DATA
LINE_OUT(L)
MUTE_CTL
LINE_OUT(R)
fsc_IN
NORMAL_IN
NORMAL_OUT
TO SYSCON
H.REC_ST(H)
I2C_CLK_AV
I2C_DATA_AV
A.MUTE(H)
N.REC_ST(H)
N.REC(H)
TO S-SUB
Fsc
SW5V
WF6
NOT USED
X2
WF5
Q2001 -Q2003
POWER SW
Q2052- Q2055
A.MUTE
SP ON
DET
VCA
PRE AMP
FILTER
OSC
Q2051
TRANS
T2051
FULL ERASE HEAD
CN2002
F. ERASE
REC ON
EP(LP) ON
1 2
A/C HEAD
CN2001
CN1
A. ERASE
REC/PB
REC EQ
WF7
IC1
(VIDEO/N.AUDIO SIGNAL PROCESSOR)

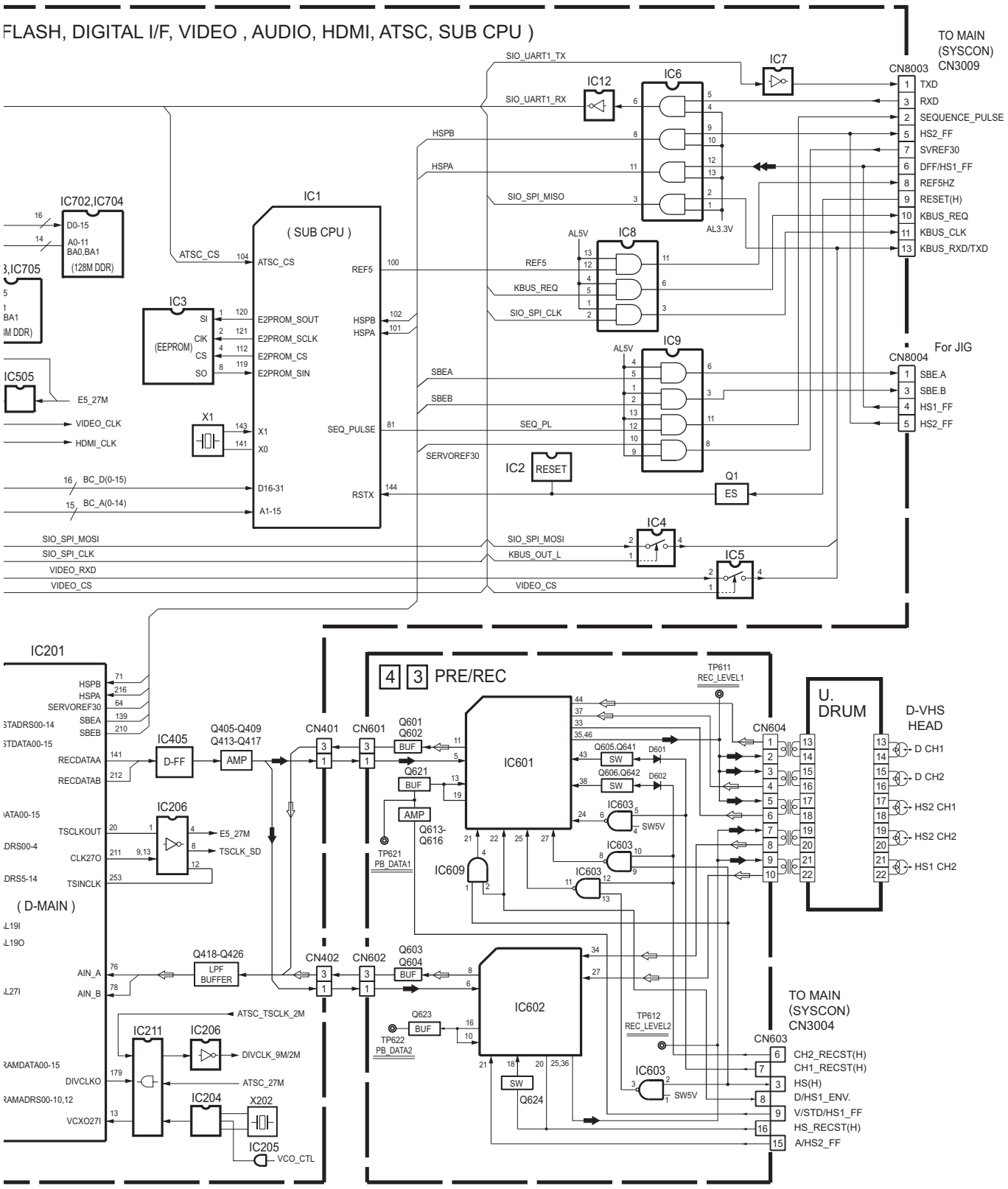
■ SYSTEM CONTROL BLOCK DIAGRAM




IC3001
M CONTROL MICRO PROCESSOR)
SIO
SII
S.CLK
S.DATA TOSYS
S.DATA FRSYS
REC_SAFETY
S3001
REC_SAFETY
S_CASS(H)
S3002
S.CASS
D_CASS(H)
S3003
D.CASS
I2C DATA _A/V
I2C CLK _A/V
HS_RECST(H)
HS2_ENV
D_REC_LEVEL2
D_REC_LEVEL1
D/HS1_ENV
CH1_RECST(H)
CH2_RECST(H)
EXP_DATA1
EXP_CLK
EXP_DATA2
C. SYNC
WF5
ATSC_P_CTL1
ATSC_P_CTL2
I2C DATA2
I2C CLK2
E2P_I2C_DATA
E2P_I2C_CLK
IC3005
DRECL
DVHSL
H.REC[H]
N.REC[H]
FAN_CTL[H]
PCTLH
PSAVE
DATA
CLK
IC3006
HS[H]
A_SELC
A_SELB
A_SELA
FLYRECH
IC3003
(SERIAL MEMORY)
SDA
SCL
CN3008
S_CLK
S_DATA_TOSYS
S_DATA_FRSYS
TO DISPLAY
CN7001
I2C_DATA_A/V
I2C_CLK_A/V
TO
S-SUB
TO
VIDEO/N.AUDIO
N.REC(H)
CN3011
HS_RECST(H)
A/HS2.FF
HS2_ENV
D_REC_LEVEL2
D_REC_LEVEL1
D/HS1_ENV
V/STD/HS1.FF
CH1_RECST(H)
CH2_RECST(H)
D_REC(L)
D_VHS(L)
HS(H)
TO DIGITAL
(D-PRE/REC)
CN603
FAN_CTL(H)
P.CTL(H)
P.SAVE(L)
TO REG
D_VHS(L)
H.REC(H)
A_SEL_C
A_SEL_B
A_SEL_A
FLY_REC(H)
TO
FMA/DEMOD
C.SYNC
TO
VIDEO/N.AUDIO
CN3101
ATSC_CTL1
ATSC_CTL2
TO
JUNCTION
I2C_DATA2
I2C_CLK2
TO
FMA/DEMOD
TO
TUNER

■ D-VHS BLOCK DIAGRAM




FLASH, DIGITAL I/F, VIDEO , AUDIO, HDMI, ATSC, SUB CPU)
TO MAIN (SYSCON) CN3009
CN8003
TXD
RXD
SEQUENCE_PULSE
HS2_FF
SVREF30
DFF/HS1_FF
REF5HZ
RESET(H)
KBUS_REQ
KBUS_CLK
KBUS_RXD/TXD
For JIG
CN8004
SBE.A
SBE.B
HS1_FF
HS2_FF
SIO_UART1_TX
SIO_UART1_RX
SIO_SPI_MISO
SIO_SPI_CLK
SIO_SPI_MOSI
KBUS_OUT_L
VIDEO_RXD
VIDEO_CS
HSPB
HSPA
SBEA
SBEB
SEQ_PL
SERVOREF30
REF5
KBUS_REQ
ATSC_CS
VIDEO_CLK
HDMI_CLK
E5_27M
BC_D(0-15)
BC_A(0-14)
AL5V
AL3.3V
IC1
(SUB CPU)
IC2
RESET
IC3
(EEPROM)
IC4
IC5
IC6
IC7
IC8
IC9
IC505
X1
Q1
ES
IC702,IC704
(128M DDR)
E2PROM_SOUT
E2PROM_SCLK
E2PROM_CS
E2PROM_SIN
SEQ_PULSE
RSTX
D16-31
A1-15
IC201
(D-MAIN)
TSCLKOUT
CLK27O
TSINCLK
AIN_A
AIN_B
IC405
D-FF
AMP
Q405-Q409
Q413-Q417
IC206
IC211
IC204
X202
IC205
VCO_CTL
DIVCLK_9M/2M
ATSC_27M
ATSC_TSCLK_2M
DIVCLKO
VCXO27I
CN401
CN601
CN402
CN602
Q601
Q602
Q621
Q603
Q604
Q623
BUF
LPF
BUFFER
Q418-Q426
Q613-
Q616
TP621
PB_DATA1
TP622
PB_DATA2
4 3 PRE/REC
IC601
IC602
IC609
IC603
SW5V
Q605,Q641
Q606,Q642
SW
Q624
D601
D602
TP611
REC_LEVEL1
TP612
REC_LEVEL2
CN604
U.
DRUM
D-VHS
HEAD
D CH1
D CH2
HS2 CH1
HS2 CH2
HS1 CH2
CN603
TO MAIN (SYSCON) CN3004
CH2_RECST(H)
CH1_RECST(H)
HS(H)
D/HS1_ENV.
V/STD/HS1_FF
HS_RECST(H)
A/HS2_FF

JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY DIGITAL VIDEO STORAGE CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YD032)

Printed in Japan
VPT

PARTS LIST

[HM-DH5US, HM-DT100US]

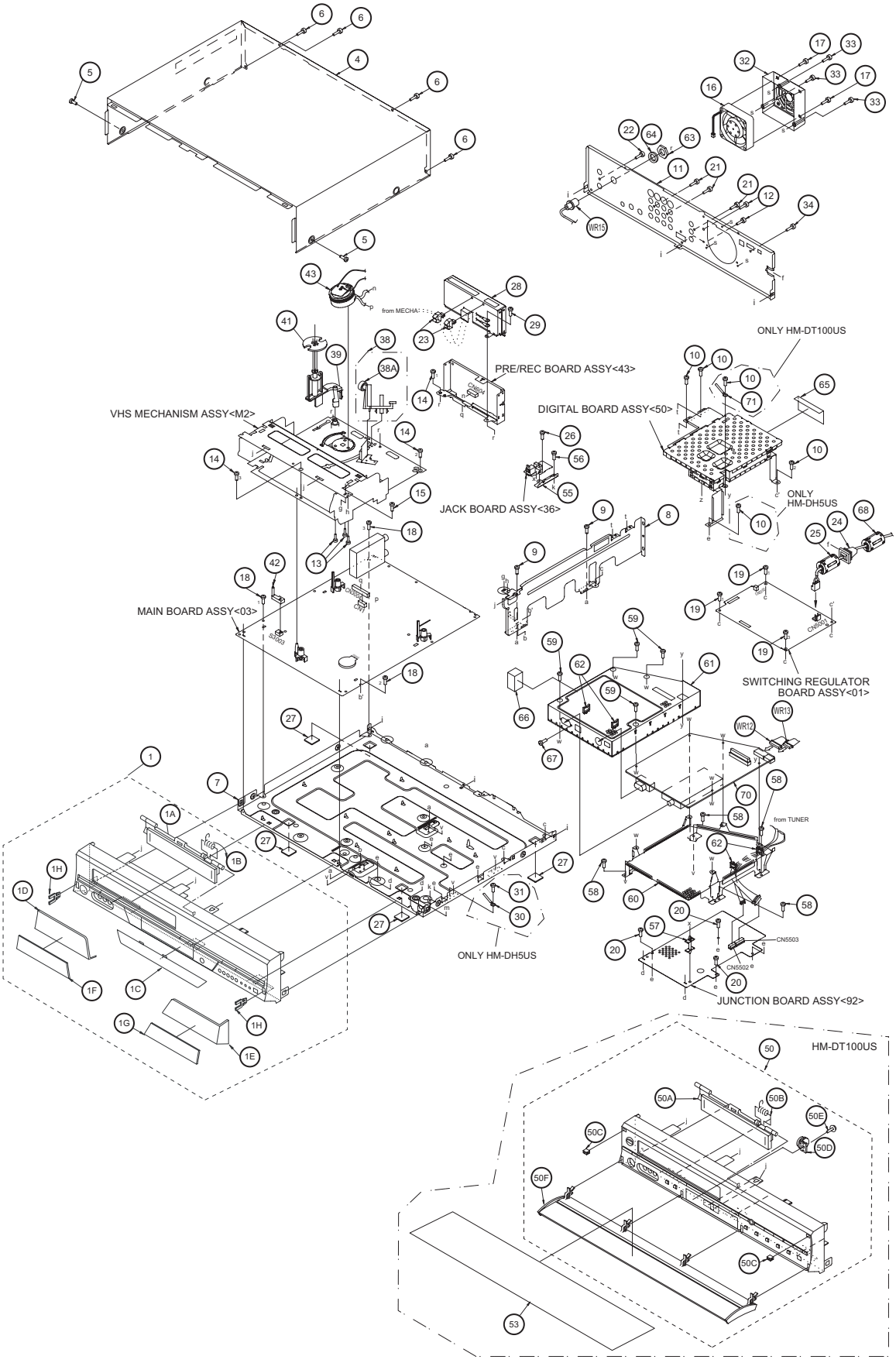
* SAFETY PRECAUTION
  Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.
* BEWARE OF BOGUS PARTS
  Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.
* (x_) in a description column shows the number of the used part.

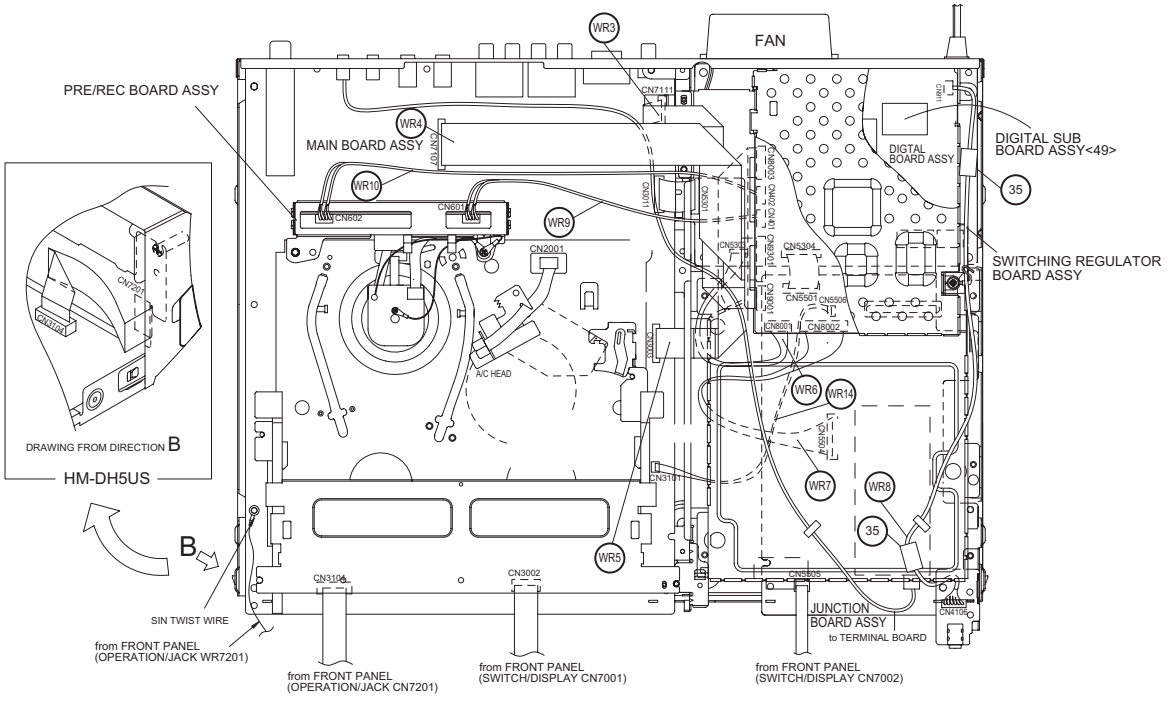
- Contents -

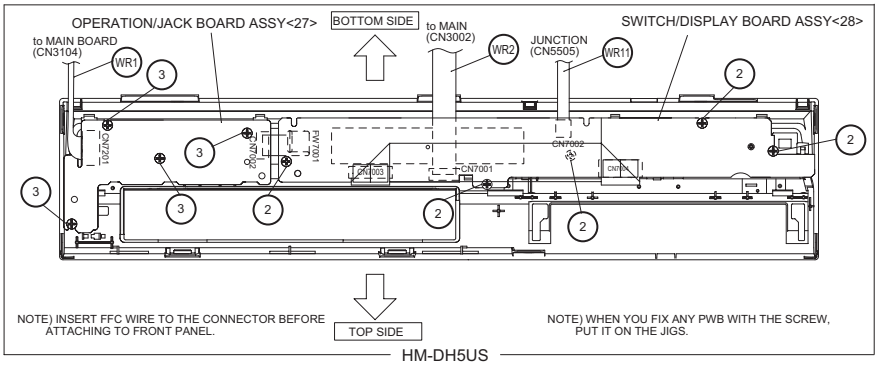
Exploded view of general assembly and parts list 3-2
VHS mechanism assembly and parts list.....3-6
Electrical parts list 3-9
Packing materials and accessories parts list 3-29

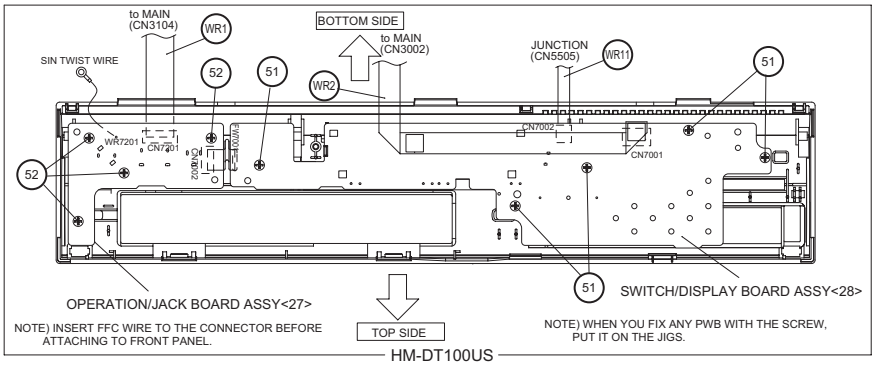
Exploded view of general assembly and parts list

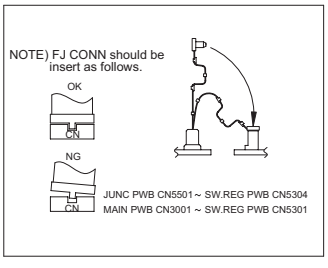
Block No. M1MM




PRE/REC BOARD ASSY
MAIN BOARD ASSY
FAN
DIGITAL SUB BOARD ASSY<49>
DIGTAL BOARD ASSY
SWITCHING REGULATOR BOARD ASSY
WR3
WR4
WR10
WR9
WR5
WR6
WR14
WR7
WR8
35
CN7111
CN602
CN601
CN2001
CN3101
CN3002
CN3106
CN5505
CN5304
CN5501
CN5508
CN8001
CN8002
A/C HEAD
DRAWING FROM DIRECTION B
HM-DH5US
B
SIN TWIST WIRE
from FRONT PANEL (OPERATION/JACK WR7201)
from FRONT PANEL (OPERATION/JACK CN7201)
from FRONT PANEL (SWITCH/DISPLAY CN7001)
from FRONT PANEL (SWITCH/DISPLAY CN7002)
JUNCTION BOARD ASSY
to TERMINAL BOARD


OPERATION/JACK BOARD ASSY<27>
BOTTOM SIDE
to MAIN (CN3002)
SWITCH/DISPLAY BOARD ASSY<28>
to MAIN BOARD (CN3104)
JUNCTION (CN5505)
WR1
WR2
WR11
NOTE) INSERT FFC WIRE TO THE CONNECTOR BEFORE ATTACHING TO FRONT PANEL.
TOP SIDE
NOTE) WHEN YOU FIX ANY PWB WITH THE SCREW, PUT IT ON THE JIGS.
HM-DH5US


to MAIN (CN3104)
WR1
BOTTOM SIDE
to MAIN (CN3002)
JUNCTION (CN5505)
WR11
SIN TWIST WIRE
WR2
OPERATION/JACK BOARD ASSY<27>
SWITCH/DISPLAY BOARD ASSY<28>
NOTE) INSERT FFC WIRE TO THE CONNECTOR BEFORE ATTACHING TO FRONT PANEL.
TOP SIDE
NOTE) WHEN YOU FIX ANY PWB WITH THE SCREW, PUT IT ON THE JIGS.
HM-DT100US


NOTE) FJ CONN should be insert as follows.
OK
NG
JUNC PWB CN5501 ~ SW.REG PWB CN5304
MAIN PWB CN3001 ~ SW.REG PWB CN5301

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

General assembly

Block No. [M][1][M][M]

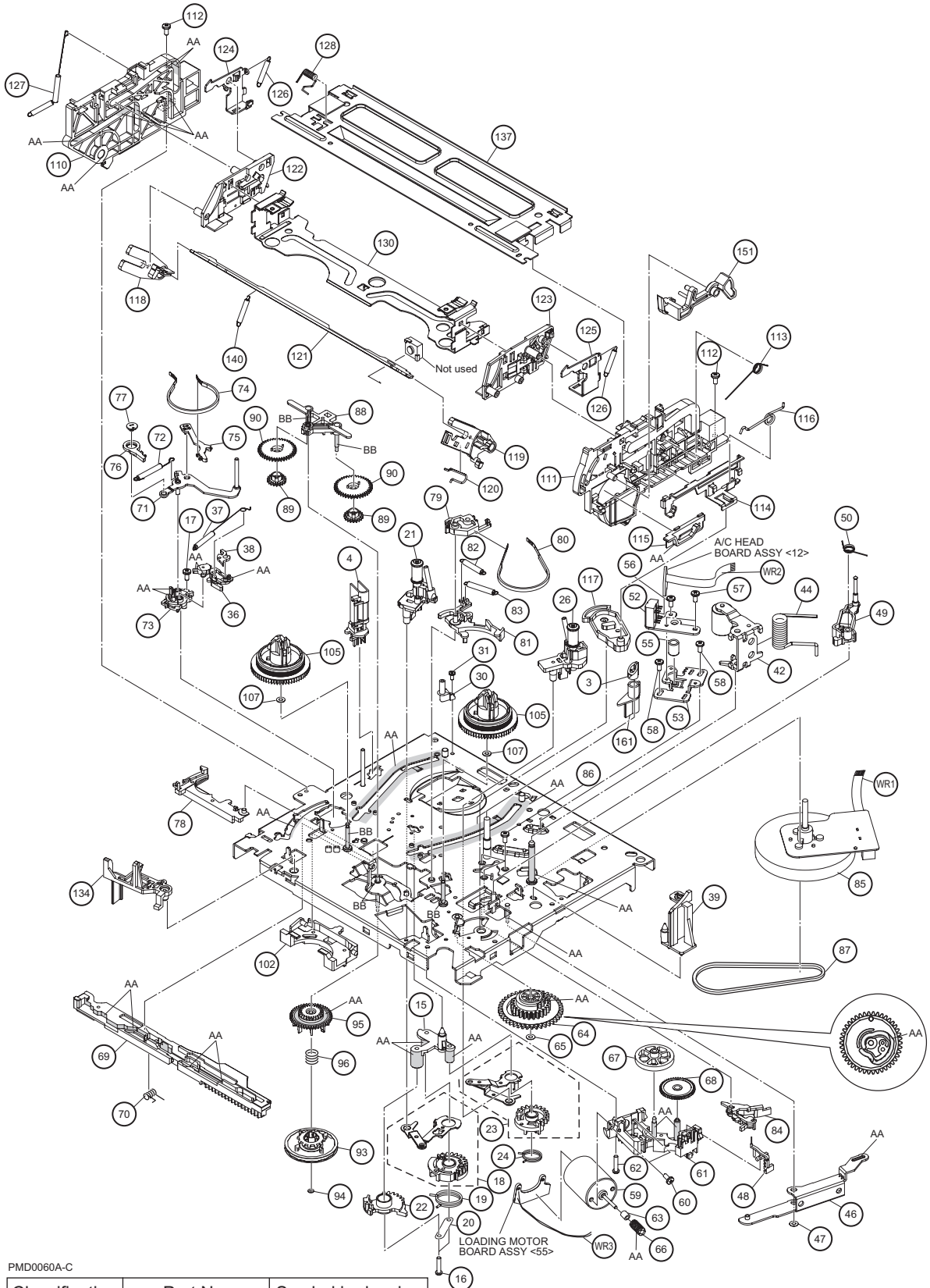
⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠ 1	LP10526-010D	FRONT PANEL ASSY		A
1A	LP21232-004A	CASSETTE DOOR		A
1B	PQ46448	TORSION SPRING		A
1C	LP31358-008A	DISPLAY WINDOW		A
1D	LP31353-001B	DOOR(L)		A
1E	LP31354-001B	DOOR(R)		A
1F	LP31356-010B	WINDOW(L)		A
1G	LP31357-008B	WINDOW(R)		A
1H	PU60109	CATCHER	(x2)	A
2	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm SWITCH/DISPLAY(x5)	A
3	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm OPERATION/JACK(x4)	A
⚠ 4	LP10460-004C	TOP COVER		
5	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP SIDE(x2)	
6	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP REAR(x4)	
⚠ 7	LP10525-001E	BOTTOM CHASSIS		
8	LP21222-001B	BRACKET(CENTER)		
9	LP31391-001A	SPECIAL SCREW	BRACKET(CENTER)(x2)	
10	LP31391-001A	SPECIAL SCREW	SHIELD FRAME(DIGITAL)(x4)	
⚠ 11	LP21287-001A	REAR COVER		A
⚠ 11	LP21287-002A	REAR COVER		B
12	QYSBSG3006MA	TAP SCREW	M3 x 6mm REAR COVER(x2)	
13	QYSPSPD3008ZA	SCREW	M3 x 8mm DRUM(x3)	
14	LP31391-002A	SPECIAL SCREW	MECHANISM(x3)	
15	LP31391-001A	SPECIAL SCREW	HOUSING	
16	QAR0326-001	FAN MOTOR		
17	QYTDSF3010MA	TAP SCREW	M3 x 10mm FAN(x2)	
18	LP31391-001A	SPECIAL SCREW	MAIN(x3)	
19	LP31391-001A	SPECIAL SCREW	SWITCHING REGLATOR(x3)	
20	LP31391-001A	SPECIAL SCREW	JUNCTION(x3)	
21	QYTDSF3008MA	TAP SCREW	M3 x 8mm JACK COVER(x3)	
22	QYTDST3005MA	TAP SCREW	M3 x 5mm TUNER	
23	PU59311	WIRE CLAMP	(x2)	
⚠ 24	QMPD620-170-JD	POWER CORD(US/CA)	1.7m BLACK	
25	QQR0917-001	CORE FILTER		A
26	LP31391-001A	SPECIAL SCREW	JACK	
27	LP31348-001A	FOOT	(x4)	
28	LP21291-001A	SHIELD CASE(PRE/REC)		
29	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm SHIELD CASE(P/R)	
30	PU49485-4	WIRE CLAMP		A
31	LP31391-001A	SPECIAL SCREW	WIRE CLAMP	A
32	LP21296-001A	COVER(FAN)		
33	QYSBSG3006MA	TAP SCREW	M3 x 6mm COVER(FAN)(x3)	
34	QYTDST3005MA	TAP SCREW	M3 x 5mm HDMI	
35	QQR0490-001	NOISE FILTER	(x2)	A
38	LP40910-002G	HEAD CLEANER ASSY		
38A	PQ46419-2	CLEANER		
39	LP40370-001F	ROLLER ARM ASSY		
41	PQ44230-2	INERTIA PLATE		
42	LP40407-001A	KNOB ASSY		
43	PDV2551A	DRUM FINAL ASSY		
⚠ 50	LP31472-002B	FRONT PANEL/DOOR ASSY		B
50A	LP21308-002A	CASSETTE DOOR		B
50B	PQ46448	TORSION SPRING		B
50C	QZW0063-001	MAGNET LATCH	(x2)	B
50D	QZW0055-005	DAMPER		B
50E	DPSF3010ZA	SCREW	FRONT PANEL	B
50F	LP10557-002C	DOOR ASSY		B
51	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm SWITCH/DISPLAY(x5)	B
52	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm OPERATION /JACK(x4)	B
53	QPH00704705	POLY SHEET	7cm x 47cm	B
55	LP31413-001B	BRACKET(JACK)		B
56	LP31391-001A	SPECIAL SCREW	BRACKET(JACK)	B
57	PEME0946-08	SPACER		B
58	LP31391-001A	SPECIAL SCREW	SHIELD FRAME(TUNER)(x4)	B
59	LP31391-001A	SPECIAL SCREW	DIGITAL TUNER UNIT(x4)	B
60	LP10551-001A	SHIELD FRAME(TUNER)		B
61	LP10552-001A	SHIELD COVER(TUNER)		B
62	PU59311	WIRE CLAMP	(x4)	B
63	LP41139-001A	NUT		B
64	QYWWSA5F005NA	WASHER	0.5mm/5mm x	B
65	LP41209-001A	C.F TAPE		B
66	LP41198-002A	SHIELD TIGHT		B
67	LP41211-001A	SPECIAL SCREW	SHIELD COVER(TUNER)	B
68	QQR0919-001	FERRITE CORE		B
⚠ 70	QAU0384-002	DIGITAL TUNER UNIT		B
71	PU49485-4	WIRE CLAMP		B
WR 1	QUQ112-1315CG	FFC WIRE	OPERATION/JACK CN7201-MAIN3104	A
WR 1	QUQ112-1310CG	FFC WIRE	OPERATION/JACK CN7201-MAIN3104	B
WR 2	QUQ112-1014CG	FFC WIRE	SWITCH/DISPLAY CN7001-MAIN CN3002	A

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
WR 2	QUQ112-1026CG	FFC WIRE	SWITCH/DISPLAY CN7001-MAIN CN3002	B
WR 3	QUQ210-1128CC	FFC WIRE	DIGITAL CN9001-MAIN CN7111	
WR 4	QUQ210-2330CC	FFC WIRE	DIGITAL CN9301-MAIN CN7107	
WR 5	QUQ210-1626CC	FFC WIRE	DIGITAL CN8003-MAIN CN3003	
WR 6	QJJ001-041414	SIN CR C-C WIRE	SWITCHING REGURATOR CN5303-DIGITAL CN8001	
WR 7	QJJ001-122212	SIN CR C-C WIRE	JUNCTION CN5504-DIGITAL CN8002	
WR 8	WJN0139-001A	E-SH C WIRE C-C	JACK CN4106-DIGITAL CN911	
WR 9	WJN0051-003A	E-SH C WIRE C-C	PRE/REC CN601-DIGITAL CN401	
WR10	WJN0051-004A	E-SH C WIRE C-C	PRE/REC CN602-DIGITAL CN402	
WR11	QUQ212-0412CG	FFC WIRE	JUNCTION CN5505-SWITCH/DISPLAY CN7002	
WR12	QJJ001-082013	SIN CR C-C WIRE	DIGITAL TUNER UNIT-JUNCTION CN5503	B
WR13	QJJ001-052210	SIN CR C-C WIRE	DIGITAL TUNER UNIT-JUNCTION CN5502	B
WR14	QJJ001-021712	SIN CR C-C WIRE	MAIN CN3101-JUNCTION CN 5506	B
WR15	WJX0025-001A	E-COAXIAL ASSY	DIGITAL TUNER UNIT	B

VHS mechanism assembly and parts list

Block No. M2MM



PMD0060A-C

Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	COSMO-HV56	BB

NOTE: The section marked in **AA** and **BB** indicate lubrication and greasing areas.

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

VHS mechanism

Block No. [M][2][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
3	LP40097-002E	GUIDE POLE CAP		
4	QAH0082-001	FULL ERASE HEAD		
15	LP30958-001B	LOADING GEAR BASE		
16	QYTPST2620ZA	TAP SCREW	M2.6 x 20mm(x2)	
17	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm	
18	LP40798-002A	LOADING GEAR(SUPPLY) ASSY		
19	LP40837-001A	TORSION SPRING(SUPPLY)		
20	LP40903-004A	FIXING PLATE		
21	LP40806-001D	POLE BASE ASSY(SUPPLY)		
22	LP30959-001B	LOADING GEAR		
23	LP40802-002A	LOADING GEAR(TAKE UP) ASSY		
24	LP40838-001A	TORSION SPRING(TAKE UP)		
26	LP40808-001E	POLE BASE ASSY(TAKE UP)		
30	LP31020-005A	ARM BASE		
31	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm	
36	LP21055-001G	TAKE UP LEVER		
37	LP40943-001A	TENSION SPRING		
38	LP40859-001D	T-UP HEAD		
39	LP30961-001C	LID GUIDE		
42	LP40810-003A	PINCH ROLLER ARM ASSY		
44	LP40840-001E	TORSION SPRING		
46	LP30963-002A	PRESS LEVER		
47	PQM30017-24	SLIT WASHER		
48	LP40930-002F	S-SWITCH		
49	LP40813-001D	GUIDE ARM ASSY		
50	LP40841-001A	TORSION SPRING		
52	NAH0005-001	AC HEAD		
53	LP30965-003A	HEAD BASE		
55	LP40842-001D	COMPRESSION SPRING		
56	QYTDST2006MA	TAP SCREW	M2 x 6mm	
57	LP41036-002A	A/C ADJ.SCREW	(x2)	
58	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm(x2)	
59	QAR0289-001	LOADING MOTOR		
60	QYTPSP3003ZA	SCREW	M3 x 3mm(x2)	
61	LP21056-002J	MOTOR BRACKET		
62	QYTPST2620ZA	TAP SCREW	M2.6 x 20mm	
63	LP40814-001B	WORM BEARING		
64	LP21044-001E	CONTROL CAM		
65	PQM30017-24	SLIT WASHER		
66	LP40815-001A	WORM GEAR		
67	LP40816-001B	HELICAL GEAR		
68	LP40817-001A	CONNECT GEAR		
69	LP10400-001N	CONTROL PLATE		
70	LP40843-001A	TORSION SPRING		
71	LP40818-002A	TENSION ARM ASSY		
72	LP40844-001F	TENSION SPRING		
73	LP21045-001E	TENSION ARM BASE		
74	LP40821-001A	TENSION BAND ASSY		
75	LP30967-001B	BAND HOLDER-1		
76	LP30968-001C	BAND HOLDER-2		
77	LP40822-002B	ADJUST PIN		
78	LP31000-005E	TENSION ARM LEVER		
79	LP21046-001C	MAIN BRAKE(TAKE UP)		
80	LP40824-001A	BAND BRAKE ASSY		
81	LP30969-002B	BRAKE LEVER		
82	LP30003-033C	TENSION SPRING		
83	LP30003-035C	TENSION SPRING		
84	LP40825-001B	CAPSTAN BRAKE ASSY		
⚠ 85	QAR0333-001	CAPSTAN MOTOR		
86	QYTPSG2606ZA	TAP SCREW	M2.6 x 6mm(x3)	
87	LP30005-010A	BELT	CAPSTAN MOTOR	
88	LP30970-001B	IDLER ARM		
89	LP40828-004A	IDLER GEAR 1	(x2)	
90	LP40829-001B	IDLER GEAR 2	(x2)	
93	LP40934-001B	CLUTCH UNIT		
94	PQM30017-47	SLIT WASHER		
95	LP30973-001A	DIRECT GEAR		
96	LP40939-001A	COMPRESSION SPRING		
102	LP30974-001C	CHANGE LEVER		
105	LP21049-001A	REEL DISK	(x2)	
107	LP30017-004A	SPACER	REEL DISK(x2)	
110	LP10401-001L	SIDE FRAME(L)		
111	LP10402-001M	SIDE FRAME(R)		
112	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm(x2)	
113	LP40917-001D	TORSION SPRING		
114	LP30976-002B	SIDE PLATE		
115	LP30977-002E	LIMIT PLATE		
116	LP40846-001C	LIMIT SPRING		
117	LP31100-002A	DRIVE LEVER		

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
118	LP30978-001B	DRIVE ARM(L)		
119	LP30979-001S	DRIVE ARM(R)		
120	LP40847-001B	TORSION SPRING		
121	LP30980-002A	CONNECT PLATE		
122	LP10403-001C	SIDE HOLDER(L)		
123	LP10404-001E	SIDE HOLDER(R)		
124	LP30983-002A	LOCK LEVER(L)		
125	LP30984-002A	LOCK LEVER(R)		
126	LP40924-001D	TENSION SPRING	(x2)	
127	LP40972-001A	EARTH SPRING(1)		
128	LP40857-001B	EARTH SPRING(2)		
130	LP30981-003B	CASSETTE HOLDER ASSY		
134	LP21051-002C	REC SAFETY LEVER		
137	LP21052-002A	TOP FRAME		
140	LP41153-001A	EARTH SPRING(3)		
151	LP30985-002M	DOOR OPENER		
161	LP40993-001A	TAPE GUIDE		
WR1	WJT0117-001A	E-CARD WIRE	DRUM	
WR2	WJT0067-001B	E-CARD WIRE	A/C HEAD CN2001	
WR3	WJS0022-001A	E-FL/RB WIRE	LOADING MOTOR	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

Electrical parts list

Switching regulator board

Block No. [0][1]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10251-01D1	SWITCHING REGULATOR BOARD ASSY		A
PW1	LPA10251-02D1	SWITCHING REGULATOR BOARD ASSY		B
IC5101	STR-G6653-F9	IC		
IC5301	UTCTL431-T	IC		
IC5301 or	MM1431AT-T	IC		
IC5301 or	L5431-T	IC		
IC5301 or	TL431/A/-T	IC		
Q5301	2SC5739/QP/	TRANSISTOR		
Q5301 or	2SD2394/EF/	TRANSISTOR		
Q5302	DTA144WUA-X	DIGI TRANSISTOR		
Q5302 or	UN511E-X	DIGI TRANSISTOR		
Q5302 or	RN2309-X	DIGI TRANSISTOR		
Q5302 or	PDTA144WU-X	DIGI TRANSISTOR		
Q5303	2SA1576A/QR/-X	TRANSISTOR		
Q5304	UMD12N-W	DIGI TRANSISTOR		
Q5304 or	XP4313-W	DIGI TRANSISTOR		
Q5305	2SD2144S/UV/-T	TRANSISTOR		
Q5305 or	2SC3576-JVC-T	TRANSISTOR		
Q5306	2SC5739/QP/	TRANSISTOR		
Q5307	2SA1585S/QR/-T	TRANSISTOR		
Q5308	PDTC114EU-X	DIGI TRANSISTOR		
Q5308 or	DTC114EUA-X	DIGI TRANSISTOR		
Q5308 or	UN5211-X	DIGI TRANSISTOR		
Q5308 or	RN1302-X	DIGI TRANSISTOR		
Q5311	2SC5739/QP/	TRANSISTOR		B
Q5312	2SD2144S/UV/-T	TRANSISTOR		B
Q5312 or	2SC3576-JVC-T	TRANSISTOR		B
Q5313	UMD12N-W	DIGI TRANSISTOR		B
Q5313 or	XP4313-W	DIGI TRANSISTOR		B
D5001	GBJ4J	BRIDGE DIODE		
D5001 or	D3SBA60	DIODE		
D5101	SARS01-T2	SI DIODE		
D5103	1F4G-T2	FR DIODE		
D5103 or	10ERB20-T2	FR DIODE		
D5103 or	ERA18-02-T2	FR DIODE		
D5103 or	AU01Z-T2	FR DIODE		
D5103 or	1SR153-400-T2	FR DIODE		
D5104	1SS133-T2	SI DIODE		
D5104 or	1SS270A-T2	SI DIODE		
D5105	10ERB20-T2	FR DIODE		
D5105 or	ERA18-02-T2	FR DIODE		
D5105 or	AU01Z-T2	FR DIODE		
D5105 or	1SR153-400-T2	FR DIODE		
D5105 or	1F4G-T2	FR DIODE		
D5106	10ERB20-T2	FR DIODE		
D5106 or	ERA18-02-T2	FR DIODE		
D5106 or	AU01Z-T2	FR DIODE		
D5106 or	1SR153-400-T2	FR DIODE		
D5106 or	1F4G-T2	FR DIODE		
D5201	1SR156-400-X	SI DIODE		
D5202	1SR156-400-X	SI DIODE		
D5203	RL2Z-LFB2	FRD		
D5206	RK34-LFB2	FUSEIODE		
D5207	RK34-LFB2	FUSEIODE		
D5208	RK34-LFB2	FUSEIODE		
D5209	RK34-LFB2	FUSEIODE		B
D5210	1F4G-T2	FR DIODE		
D5210 or	PG104RS-T2	FR DIODE		
D5210 or	10ERB20-T2	FR DIODE		
D5210 or	1SR153-400-T2	FR DIODE		
D5210 or	ERA18-02-T2	FR DIODE		
D5211	ERA18-02-T2	FR DIODE		
D5211 or	1SR153-400-T2	FR DIODE		
D5211 or	10ERB20-T2	FR DIODE		
D5211 or	1F4G-T2	FR DIODE		
D5301	MTZJ15A-T2	Z DIODE		
D5301 or	RD15ES/B1/-T2	Z DIODE		
D5302	MTZJ27D-T2	Z DIODE		
D5302 or	RD27ES/B4/-T2	Z DIODE		
D5303	MTZJ11C-T2	Z DIODE		
D5303 or	RD11ES/B3/-T2	Z DIODE		
D5304	MTZJ5.6C-T2	Z DIODE		
D5304 or	RD5.6ES/B3/-T2	Z DIODE		
D5305	MTZJ7.5A-T2	Z DIODE		
D5305 or	RD7.5ES/B1/-T2	Z DIODE		
D5306	MTZJ5.6C-T2	Z DIODE		B
D5306 or	RD5.6ES/B3/-T2	Z DIODE		B
D5307	MTZJ13A-T2	Z DIODE		B
D5307 or	RD13ES/B1/-T2	Z DIODE		B
⚠ PC5101	PC123Y22FZ	PHOTO COUPLER		
⚠ C5001	QFZ9073-683	MM CAPACITOR	0.068uF AC250V M	
⚠ C5002	QFZ9073-223	MM CAPACITOR	0.022uF AC250V M	
C5003	QEZ0639-337	E CAPACITOR	330uF 200V M	
⚠ C5004	QCZ9079-472	C CAPACITOR	4700pF AC250V M	
C5102	QCZ0349-472Z	C CAPACITOR	4700pF 1kV K	
C5103	QEMU1VM-276Z	E CAPACITOR	27uF 35V M	
C5104	QCZ0136-471Z	C CAPACITOR	470pF 1kV K	
C5105	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C5106	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C5107	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C5201	QEMX1VM-127Z	E CAPACITOR	120uF 35V M	
C5202	QETN2AM-475Z	E CAPACITOR	4.7uF 100V M	
C5203	QEMT1CM-128	E CAPACITOR	1200uF 16V M	
C5206	QEMT1AM-278	E CAPACITOR	2700uF 10V M	
C5207	QEMT1AM-128	E CAPACITOR	1200uF 10V M	
C5208	QEMT1AM-128	E CAPACITOR	1200uF 10V M	B
C5209	QEMU1HM-186Z	E CAPACITOR	18uF 50V M	
C5210	QEMX0JM-227Z	E CAPACITOR	220uF 6.3V M	
C5301	QFVF1HJ-154Z	MF CAPACITOR	0.15uF 50V J	
C5302	QFLC1HJ-333Z	M CAPACITOR	0.033uF 50V J	
C5303	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5306	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5307	QETN1CM-107Z	E CAPACITOR	100uF 16V M	B
C5308	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5309	QETN1VM-476Z	E CAPACITOR	47uF 35V M	
C5310	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C5311	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5312	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5315	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C5317	QETN1CM-107Z	E CAPACITOR	100uF 16V M	B
⚠ R5001	QRZ9046-475Z	C RESISTOR	4.7MΩ 1/2W K	
R5101	QRG02GJ-683	OMF RESISTOR	68kΩ 2W J	
R5102	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R5103	QRE141J-684Y	C RESISTOR	680kΩ 1/4W J	
R5104	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5105	QRE141J-680Y	C RESISTOR	68Ω 1/4W J	
R5106	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
R5107	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R5108	QRT01DJ-R33X	MF RESISTOR	0.33Ω 1W J	
⚠ R5109	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5301	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R5302	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R5303	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R5304	NRSA63D-682X	MG RESISTOR	6.8kΩ 1/16W D	
R5305	NRSA63D-243X	MG RESISTOR	24kΩ 1/16W D	
R5306	NRSA63D-392X	MG RESISTOR	3.9kΩ 1/16W D	
R5307	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R5308	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R5309	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5310	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R5311	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R5312	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5313	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5314	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R5315	QRE121J-101Y	C RESISTOR	100Ω 1/2W J	
R5316	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5317	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5324	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R5325	QRE141J-8R2Y	C RESISTOR	8.2Ω 1/4W J	
⚠ R5326	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5327	QRE121J-181Y	C RESISTOR	180Ω 1/2W J	
R5328	QRE121J-181Y	C RESISTOR	180Ω 1/2W J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
R5329	QRE121J-181Y	C RESISTOR	180Ω 1/2W J	
R5330	QRE121J-181Y	C RESISTOR	180Ω 1/2W J	
R5331	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	B
R5332	QRE121J-102Y	C RESISTOR	1kΩ 1/2W J	B
R5333	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	B
L5202	PELN1184	CHOKE COIL		
L5205	QQR1169-001	CHOKE COIL		
L5206	PELN1184	CHOKE COIL		
L5207	PELN1184	CHOKE COIL		B
⚠ T5001	QQS0281-001	SW TRANSF		
B5302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B5309	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
⚠ CN5001	QGA7901C3-02	CONNECTOR	W-B (1-2)	
CN5301	QGB1231L1-15	CONNECTOR	B-B (1-15)	
CN5302	QGA2001C1-02	CONNECTOR	W-B (1-2)	
CN5303	QGA2001C1-04	CONNECTOR	W-B (1-4)	
CN5304	QGB1231L1-15	CONNECTOR	B-B (1-15)	
⚠ CP5301	QMFZ049-1R5Z-E	FUSE	1.5A 125V	
⚠ F5001	QMF51N2-1R6-J1	FUSE	1.6A AC250V	
FC5001	QNG0020-001Z	FUSE CLIP		
FC5002	QNG0020-001Z	FUSE CLIP		
⚠ LF5002	QQR0908-001	LINE FILTER		
⚠ VA5001	QAF0039-431Z	VARISTOR	430V	
W5321	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W5322	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

Main board

Block No. [0][3]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10253-01D	MAIN BOARD ASSY		A
PW1	LPA10253-02D	MAIN BOARD ASSY		B
IC1	JCP8060-NSA	IC		
IC501	JCP8058-2	IC		
IC2201	AN3663FBP	IC		
IC2601	CD4053BM-X	IC		
IC2601 or	BU4053BCF-XE	IC		
IC2602	BA15218F-XE	IC		
IC2621	CD4053BM-X	IC		
IC2621 or	BU4053BCF-XE	IC		
IC2622	BA15218F-XE	IC		
IC2641	BA15218F-XE	IC		
IC3001	HD6432194SXD66F	IC(MCU)	MASK	
IC3002	S-80827CNNB-G-W	IC		
IC3003	LPN0893-001B-11	IC(EEPROM)	*(REFER TO BELOW)	A
IC3003	LPN0893-002D-12	IC(EEPROM)	*(REFER TO BELOW)	B
IC3005	BU2090FS-X	IC		
IC3006	BU2090FS-X	IC		
IC7101	CD74HC4052M-X	IC		
IC7101 or	74HC4052D-X	IC		
IC7102	CD74HC4052M-X	IC		
IC7102 or	74HC4052D-X	IC		
Q1	DTC144WUA-X	DIGI TRANSISTOR		
Q1 or	PDTC144WU-X	DIGI TRANSISTOR		
Q1 or	UN521E-X	DIGI TRANSISTOR		
Q1 or	RN1309-X	DIGI TRANSISTOR		
Q7	2SC4081/S/-X	TRANSISTOR		
Q8	2SC4081/S/-X	TRANSISTOR		
Q9	2SC4081/S/-X	TRANSISTOR		
Q10	2SC4081/S/-X	TRANSISTOR		
Q11	DTA114WUA-X	DIGI TRANSISTOR		
Q12	DTA114WUA-X	DIGI TRANSISTOR		
Q13	2SC4081/S/-X	TRANSISTOR		
Q14	2SC4081/S/-X	TRANSISTOR		
Q1701	2SA1576A/QR/-X	TRANSISTOR		
Q1702	2SA1576A/QR/-X	TRANSISTOR		
Q1703	DTC144WUA-X	DIGI TRANSISTOR		
Q1703 or	PDTC144WU-X	DIGI TRANSISTOR		
Q1703 or	UN521E-X	DIGI TRANSISTOR		
Q1703 or	RN1309-X	DIGI TRANSISTOR		
Q1704	2SA1576A/QR/-X	TRANSISTOR		
Q1705	DTC144WUA-X	DIGI TRANSISTOR		
Q1705 or	PDTC144WU-X	DIGI TRANSISTOR		
Q1705 or	UN521E-X	DIGI TRANSISTOR		
Q1705 or	RN1309-X	DIGI TRANSISTOR		
Q1706	DTC144WUA-X	DIGI TRANSISTOR		
Q1706 or	PDTC144WU-X	DIGI TRANSISTOR		
Q1706 or	UN521E-X	DIGI TRANSISTOR		
Q1706 or	RN1309-X	DIGI TRANSISTOR		
Q2001	2SC4081/QRS/-X	TRANSISTOR		
Q2001 or	2SD1819A/QRS/-X	TRANSISTOR		
Q2001 or	2PC4081/R/-X	TRANSISTOR		
Q2002	2SC4081/QRS/-X	TRANSISTOR		
Q2002 or	2SD1819A/QRS/-X	TRANSISTOR		
Q2002 or	2PC4081/R/-X	TRANSISTOR		
Q2003	DTA144WUA-X	DIGI TRANSISTOR		
Q2003 or	PDTA144WU-X	DIGI TRANSISTOR		
Q2003 or	UN511E-X	DIGI TRANSISTOR		
Q2003 or	RN2309-X	DIGI TRANSISTOR		
Q2051	2SC4081/QRS/-X	TRANSISTOR		
Q2051 or	2SD1819A/QRS/-X	TRANSISTOR		
Q2051 or	2PC4081/R/-X	TRANSISTOR		
Q2052	2SA1576A/QR/-X	TRANSISTOR		
Q2052 or	2SB1218A/QR/-X	TRANSISTOR		
Q2052 or	2PA1576/R/-X	TRANSISTOR		
Q2053	DTC144WUA-X	DIGI TRANSISTOR		
Q2053 or	PDTC144WU-X	DIGI TRANSISTOR		
Q2053 or	UN521E-X	DIGI TRANSISTOR		
Q2053 or	RN1309-X	DIGI TRANSISTOR		
Q2054	2SA1576A/QR/-X	TRANSISTOR		
Q2054 or	2SB1218A/QR/-X	TRANSISTOR		
Q2054 or	2PA1576/R/-X	TRANSISTOR		
Q2055	DTC144WUA-X	DIGI TRANSISTOR		
Q2055 or	PDTC144WU-X	DIGI TRANSISTOR		
Q2055 or	UN521E-X	DIGI TRANSISTOR		
Q2055 or	RN1309-X	DIGI TRANSISTOR		
Q2201	DTA144WUA-X	DIGI TRANSISTOR		
Q2201 or	PDTA144WU-X	DIGI TRANSISTOR		
Q2201 or	UN511E-X	DIGI TRANSISTOR		
Q2201 or	RN2309-X	DIGI TRANSISTOR		
Q2202	DTC144WUA-X	DIGI TRANSISTOR		
Q2202 or	PDTC144WU-X	DIGI TRANSISTOR		
Q2202 or	UN521E-X	DIGI TRANSISTOR		
Q2202 or	RN1309-X	DIGI TRANSISTOR		
Q2203	2SC4081/QRS/-X	TRANSISTOR		
Q2203 or	2PC4081/R/-X	TRANSISTOR		
Q2203 or	2SD1819A/QRS/-X	TRANSISTOR		
Q2204	2SC4081/QRS/-X	TRANSISTOR		
Q2204 or	2PC4081/R/-X	TRANSISTOR		
Q2204 or	2SD1819A/QRS/-X	TRANSISTOR		
Q2251	DTC144WUA-X	DIGI TRANSISTOR		
Q2251 or	PDTC144WU-X	DIGI TRANSISTOR		
Q2251 or	UN521E-X	DIGI TRANSISTOR		
Q2251 or	RN1309-X	DIGI TRANSISTOR		
Q2252	DTC144WUA-X	DIGI TRANSISTOR		
Q2252 or	PDTC144WU-X	DIGI TRANSISTOR		
Q2252 or	UN521E-X	DIGI TRANSISTOR		
Q2252 or	RN1309-X	DIGI TRANSISTOR		
Q2253	DTC144WUA-X	DIGI TRANSISTOR		
Q2253 or	PDTC144WU-X	DIGI TRANSISTOR		
Q2253 or	UN521E-X	DIGI TRANSISTOR		
Q2253 or	RN1309-X	DIGI TRANSISTOR		
Q2254	DTC114EUA-X	DIGI TRANSISTOR		
Q2254 or	PDTC114EU-X	DIGI TRANSISTOR		
Q2254 or	UN5211-X	DIGI TRANSISTOR		
Q2254 or	RN1302-X	DIGI TRANSISTOR		
Q2277	2SC4081/QRS/-X	TRANSISTOR		
Q2277 or	2PC4081/R/-X	TRANSISTOR		
Q2277 or	2SD1819A/QRS/-X	TRANSISTOR		
Q2278	2SC4081/QRS/-X	TRANSISTOR		
Q2278 or	2PC4081/R/-X	TRANSISTOR		
Q2278 or	2SD1819A/QRS/-X	TRANSISTOR		
Q2279	DTA114EUA-X	DIGI TRANSISTOR		
Q2279 or	PDTA114EU-X	DIGI TRANSISTOR		
Q2279 or	UN5111-X	DIGI TRANSISTOR		
Q2279 or	RN2302-X	DIGI TRANSISTOR		
Q2280	2SC4081/QRS/-X	TRANSISTOR		

*The VCR goes to jig RCU mode after replacing the EEPROM and the VCR does not accept some RCU command.
Therefore please set the VCR to the user RCU mode after replacing the EEPROM.
The method of setting the VCR to the user RCU mode is written on the service manual.

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q2280	or 2PC4081/R/-X	TRANSISTOR		
Q2280	or 2SD1819A/QRS/-X	TRANSISTOR		
Q2281	DTA114EUA-X	DIGI TRANSISTOR		
Q2281	or PDTA114EU-X	DIGI TRANSISTOR		
Q2281	or UN5111-X	DIGI TRANSISTOR		
Q2281	or RN2302-X	DIGI TRANSISTOR		
Q2282	DTA114EUA-X	DIGI TRANSISTOR		
Q2282	or PDTA114EU-X	DIGI TRANSISTOR		
Q2282	or UN5111-X	DIGI TRANSISTOR		
Q2282	or RN2302-X	DIGI TRANSISTOR		
Q2283	DTC144WUA-X	DIGI TRANSISTOR		
Q2283	or PDTC144WU-X	DIGI TRANSISTOR		
Q2283	or UN521E-X	DIGI TRANSISTOR		
Q2283	or RN1309-X	DIGI TRANSISTOR		
Q2284	2SC4081/QRS/-X	TRANSISTOR		
Q2284	or 2PC4081/R/-X	TRANSISTOR		
Q2284	or 2SD1819A/QRS/-X	TRANSISTOR		
Q2601	DTA144WUA-X	DIGI TRANSISTOR		
Q2601	or PDTA144WU-X	DIGI TRANSISTOR		
Q2601	or UN511E-X	DIGI TRANSISTOR		
Q2601	or RN2309-X	DIGI TRANSISTOR		
Q2602	DTC144WUA-X	DIGI TRANSISTOR		
Q2602	or PDTC144WU-X	DIGI TRANSISTOR		
Q2602	or UN521E-X	DIGI TRANSISTOR		
Q2602	or RN1309-X	DIGI TRANSISTOR		
Q2603	2SC4081/QRS/-X	TRANSISTOR		
Q2603	or 2PC4081/R/-X	TRANSISTOR		
Q2603	or 2SD1819A/QRS/-X	TRANSISTOR		
Q2604	2SC4081/QRS/-X	TRANSISTOR		
Q2604	or 2PC4081/R/-X	TRANSISTOR		
Q2604	or 2SD1819A/QRS/-X	TRANSISTOR		
Q3002	PTZ-NV16	IC(PHOTO SENSOR)		
Q3002	or PTZ-NV16A	IC(PHOTO SENSOR		
Q3003	PTZ-NV16	IC(PHOTO SENSOR)		
Q3003	or PTZ-NV16A	IC(PHOTO SENSOR)		
Q3004	2SD1819A/QRS/-X	TRANSISTOR		
Q3004	or 2SC4081/QRS/-X	TRANSISTOR		
Q3004	or 2PC4081/R/-X	TRANSISTOR		
Q3005	2SD1819A/QRS/-X	TRANSISTOR		
Q3005	or 2SC4081/QRS/-X	TRANSISTOR		
Q3005	or 2PC4081/R/-X	TRANSISTOR		
Q3011	DTC143EUA-X	DIGI TRANSISTOR		
Q3011	or UN521L-X	DIGI TRANSISTOR		
Q3011	or PDTC143EU-X	DIGI TRANSISTOR		
Q3011	or RN1301-X	TRANSISTOR		
Q3012	UN521E-X	DIGI TRANSISTOR		
Q3012	or DTC144WUA-X	DIGI TRANSISTOR		
Q3012	or RN1309-X	DIGI TRANSISTOR		
Q3012	or PDTC144WU-X	DIGI TRANSISTOR		
Q3013	UN521E-X	DIGI TRANSISTOR		
Q3013	or DTC144WUA-X	DIGI TRANSISTOR		
Q3013	or RN1309-X	DIGI TRANSISTOR		
Q3013	or PDTC144WU-X	DIGI TRANSISTOR		
Q4001	UN5211-X	DIGI TRANSISTOR		
Q4001	or DTC114EUA-X	DIGI TRANSISTOR		
Q4001	or RN1302-X	DIGI TRANSISTOR		
Q4001	or PDTC114EU-X	DIGI TRANSISTOR		
Q4002	UN5211-X	DIGI TRANSISTOR		
Q4002	or DTC114EUA-X	DIGI TRANSISTOR		
Q4002	or RN1302-X	DIGI TRANSISTOR		
Q4002	or PDTC114EU-X	DIGI TRANSISTOR		
Q4003	UN5211-X	DIGI TRANSISTOR		
Q4003	or DTC114EUA-X	DIGI TRANSISTOR		
Q4003	or RN1302-X	DIGI TRANSISTOR		
Q4003	or PDTC114EU-X	DIGI TRANSISTOR		
Q6001	2SD2144S/UV/-T	TRANSISTOR		
Q6002	2SB1218A/QR/-X	TRANSISTOR		
Q6002	or 2SA1576A/QR/-X	TRANSISTOR		
Q6002	or 2PA1576/R/-X	TRANSISTOR		
Q6030	2SB1218A/QR/-X	TRANSISTOR		
Q6030	or 2SA1576A/QR/-X	TRANSISTOR		
Q6030	or 2PA1576/R/-X	TRANSISTOR		
Q7151	2SC1317/RS/-T	TRANSISTOR		
D2001	1SS133-T2	SI DIODE		
D2001	or 1SS270A-T2	SI DIODE		
D2251	1SS133-T2	SI DIODE		
D2251	or 1SS270A-T2	SI DIODE		
D3001	LNB2301L01VI	LED		
D3002	1SS133-T2	SI DIODE		
D3003	RD39ES/B3/-T2	Z DIODE		
D3003	or MTZJ39C-T2	Z DIODE		
D3004	10EDB20-T2	SI DIODE		
D3005	10EDB20-T2	SI DIODE		
D3011	1SS355-X	SI DIODE		
D3012	10EDB20-T2	SI DIODE		
D4001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
D4001	or NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
D4002	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
D4002	or NRSA02J-0R0C	MG RESISTOR	0Ω 1/10W J	
D6002	HZ30-2L-T2	Z DIODE		
D6002	or HZ30-2LTD	Z DIODE		
D7151	1SS133-T2	SI DIODE		
PC3001	RPI-304J	IC(PHOTO SENSOR)		
PC3002	RPI-304J	IC(PHOTO SENSOR)		
C1	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C2	NDC31HJ-4R0X	C CAPACITOR	4pF 50V J	
C3	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C4	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C5	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C9	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C10	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C11	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C13	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C14	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C15	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C16	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C18	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C19	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C20	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C21	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C23	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C24	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C25	QEKJ1HM-335Z	E CAPACITOR	3.3uF 50V M	
C26	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C27	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C30	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C31	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C32	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C33	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C34	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C35	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C36	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C37	NDC31HJ-4R0X	C CAPACITOR	4pF 50V J	
C38	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C39	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C40	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C41	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C43	QEKJ1HM-335Z	E CAPACITOR	3.3uF 50V M	
C44	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C45	NCB31EK-472X	C CAPACITOR	4700pF 25V K	
C46	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C47	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M	
C48	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C49	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C50	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C52	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C56	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C57	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C58	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C59	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C60	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C61	QEKC0JM-476Z	E CAPACITOR	47uF 6.3V M	
C62	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C63	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C64	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C69	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C70	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C501	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C502	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C503	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
C504	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C507	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C508	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C509	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C510	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C511	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C513	NDC31HG-221X	C CAPACITOR	220pF 50V G	
C514	NDC31HG-271X	C CAPACITOR	270pF 50V G	
C515	NDC31HG-121X	C CAPACITOR	120pF 50V G	
C516	NDC31HG-271X	C CAPACITOR	270pF 50V G	
C517	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C518	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C519	NDC31HG-271X	C CAPACITOR	270pF 50V G	
C520	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C521	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C522	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C523	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C524	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C525	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C528	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C529	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C536	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C539	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C541	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C1701	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C1702	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C1703	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C1704	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C1705	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C1706	NDC31HJ-150X	C CAPACITOR	15pF 50V J	
C1707	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1708	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C1709	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2001	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2002	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C2003	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C2005	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2006	NCB31EK-682X	C CAPACITOR	6800pF 25V K	
C2007	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C2008	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2009	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C2010	NCB31HK-681X	C CAPACITOR	680pF 50V K	
C2011	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2012	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2051	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C2053	NCB31EK-472X	C CAPACITOR	4700pF 25V K	
C2054	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C2055	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2056	QFV91HJ-823Z	MF CAPACITOR	0.082uF 50V J	
C2201	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2202	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2203	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2204	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C2205	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2206	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2207	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C2208	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C2209	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2210	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2211	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C2212	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C2214	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C2215	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C2216	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C2219	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C2220	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2221	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C2222	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2251	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2252	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C2253	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C2254	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C2255	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2256	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2257	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2259	QEKJ1HM-334Z	E CAPACITOR	0.33uF 50V M	
C2260	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C2281	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2282	NDC31HJ-121X	C CAPACITOR	120pF 50V J	
C2603	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C2605	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C2607	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C2608	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C2611	NCB31HK-681X	C CAPACITOR	680pF 50V K	
C2612	NCB31HK-681X	C CAPACITOR	680pF 50V K	
C2623	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2626	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2627	NCB31HK-681X	C CAPACITOR	680pF 50V K	
C2628	NCB31HK-681X	C CAPACITOR	680pF 50V K	
C2642	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2644	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2647	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C2648	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C2649	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C2650	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C3004	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C3011	QETL0JM-478	E CAPACITOR	4700uF 6.3V M	
C3012	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3013	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C3014	QEKC0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3016	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C3022	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3024	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C3026	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C3027	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C3030	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C3031	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C3032	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C3033	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C3036	NDC31HJ-180X	C CAPACITOR	18pF 50V J	
C3037	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C3039	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C3041	NDC31HJ-150X	C CAPACITOR	15pF 50V J	
C3042	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3043	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3052	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3054	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C3072	QEKJ1HM-336Z	E CAPACITOR	33uF 50V M	
C3561	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C4002	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4004	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C4006	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C4008	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C4010	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C4011	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4012	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4014	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C4015	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
C4016	NDC31HJ-821X	C CAPACITOR	820pF 50V J	
C4017	QDXB1CM-222Y	C CAPACITOR	2200pF 16V M	
C4031	QEKJ1CM-336Z	E CAPACITOR	33uF 16V M	
C4106	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C6001	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C6006	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	B
C6501	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6502	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C6503	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C6504	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6505	QEKJ1HM-335Z	E CAPACITOR	3.3uF 50V M	
C6508	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C6509	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6512	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C6513	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6514	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C6515	QEKJ1HM-335Z	E CAPACITOR	3.3uF 50V M	
C6516	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C6517	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C6532	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7101	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C7103	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7104	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7110	QETN0JM-108Z	E CAPACITOR	1000uF 6.3V M	
C7111	QETN0JM-108Z	E CAPACITOR	1000uF 6.3V M	
C7112	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
C7113	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7114	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7115	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7116	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7121	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7134	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7151	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
R1	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J	
R2	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R3	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R11	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R12	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R14	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R18	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R19	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R21	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R22	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R27	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R37	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R501	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R503	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R504	NRSA63D-561X	MG RESISTOR	560Ω 1/16W D	
R505	NRSA63D-102X	MG RESISTOR	1kΩ 1/16W D	
R506	NRSA63D-392X	MG RESISTOR	3.9kΩ 1/16W D	
R507	NRSA63D-392X	MG RESISTOR	3.9kΩ 1/16W D	
R508	NRSA63D-102X	MG RESISTOR	1kΩ 1/16W D	
R510	NRSA63J-475X	MG RESISTOR	4.7MΩ 1/16W J	
R511	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1701	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1702	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R1703	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R1704	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R1705	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J	
R1706	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R1707	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1708	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2007	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2010	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2013	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2014	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R2015	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R2016	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2017	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R2018	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2019	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2021	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R2022	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R2023	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R2024	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2053	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2054	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2055	NRSA63J-3R3X	MG RESISTOR	3.3Ω 1/16W J	
R2056	QRE141J-680Y	C RESISTOR	68Ω 1/4W J	
R2057	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2058	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R2059	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2060	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R2066	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2201	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2202	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2203	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2204	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2205	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2206	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2207	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2208	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2209	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R2210	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2211	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2212	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2213	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2214	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R2215	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
R2218	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R2219	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2220	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2221	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2222	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2223	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2224	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2232	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2235	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2251	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2252	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R2253	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R2254	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2255	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2256	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R2257	NRSA63J-684X	MG RESISTOR	680kΩ 1/16W J	
R2258	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2282	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R2283	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R2284	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R2285	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R2286	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R2287	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2288	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2289	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2290	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2601	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R2602	QRE141J-390Y	C RESISTOR	39Ω 1/4W J	
R2603	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R2604	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R2605	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2606	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2607	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2608	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2609	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2610	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2611	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2621	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R2622	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R2623	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2624	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2625	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2626	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2627	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2641	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2642	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2661	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2662	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2663	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2664	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R2665	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3011	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3012	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3013	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3014	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3015	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3016	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3017	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3018	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3019	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3020	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3021	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3022	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3025	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3026	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3027	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3029	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3030	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3031	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3034	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3035	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3036	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3037	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3038	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R3039	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3040	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3041	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3044	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3046	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3047	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3048	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
R3049	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3050	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3051	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R3052	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R3053	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R3054	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3055	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3056	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3057	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3060	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3061	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3062	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3063	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R3066	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3069	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3071	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3072	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3073	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3074	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3075	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3076	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3077	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3079	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3081	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3083	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3085	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3086	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3087	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3088	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3089	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3090	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3091	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3092	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3093	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3094	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3095	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3096	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3097	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3099	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3100	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R3103	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3104	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3105	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3106	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3111	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3112	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3113	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3205	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
R3206	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R3207	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R3208	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R3209	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R3210	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R3211	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R3212	QRE141J-474Y	C RESISTOR	470kΩ 1/4W J	
R3213	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R3214	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3215	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3216	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3217	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R3218	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3219	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3220	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3222	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3223	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3224	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3227	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3228	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3229	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R3230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3231	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3235	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3236	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3237	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3238	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3241	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3242	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3243	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3244	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3253	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3264	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R3270	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3271	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3272	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3273	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3274	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3275	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3276	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3277	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3278	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3279	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3280	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R3281	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R3282	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R3283	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R3284	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R3285	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3286	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3292	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3293	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3294	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3295	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3296	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3298	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3299	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R4003	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R4004	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R4005	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4007	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4008	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4009	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4012	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R4013	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4015	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4017	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6001	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R6002	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R6003	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6020	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6021	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6030	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R6031	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R6502	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R7103	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7104	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7105	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7106	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7107	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7108	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7109	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7110	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7111	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7112	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7113	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7114	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7115	NRVA63D-750X	CMF RESISTOR	75Ω 1/16W D	
R7116	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7118	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7119	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7120	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7121	NRVA63D-750X	CMF RESISTOR	75Ω 1/16W D	
R7122	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7124	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7125	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7126	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7133	NRVA63D-750X	CMF RESISTOR	75Ω 1/16W D	
R7134	NRVA63D-750X	CMF RESISTOR	75Ω 1/16W D	
R7135	NRVA63D-750X	CMF RESISTOR	75Ω 1/16W D	
R7151	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7152	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R7153	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7154	QRE121J-100Y	C RESISTOR	10Ω 1/2W J	
R7155	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
VR2251	QVP0039-103Z	TRIM RESISTOR	10kΩ A.REC FM	
L1	QQL231J-151Y	COIL	150uH J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
L3	QQL29BJ-100Z	P COIL	10uH J	
L5	QQL29BJ-100Z	P COIL	10uH J	
⚠ L6	QQL29BJ-100Z	P COIL	10uH J	
L9	QQL01BJ-561Z	P COIL	560uH J	
⚠ L10	QQL29BJ-100Z	P COIL	10uH J	
L15	QQL01BJ-120Z	P COIL	12uH J	
L501	QQL29BJ-101Z	P COIL	100uH J	
L502	QQL29BJ-100Z	P COIL	10uH J	
L1701	QQL071J-150Y	COIL	15uH J	
L1702	QQL29BJ-100Z	P COIL	10uH J	
L2001	QQL29BJ-100Z	P COIL	10uH J	
L2201	QQL29BJ-100Z	P COIL	10uH J	
L2251	QQL29BJ-100Z	P COIL	10uH J	
L2272	QQL231J-1R8Y	COIL	1.8uH J	
L2281	QQL29BJ-100Z	P COIL	10uH J	
⚠ L3001	QQL231J-R22Y	COIL	0.22uH J	
L3002	QQL231J-R22Y	COIL	0.22uH J	
L4001	QQL231K-1R0Y	COIL	1uH K	
L6005	QQL29BK-1R0Z	P COIL	1uH K	B
L7101	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	
L7151	QQL29BJ-101Z	P COIL	100uH J	
T2051	PELN0832	OSC TRANS		
B1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B6020	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B6502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B6608	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B6609	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
CN1	QGF1028C1-11	CONNECTOR	FFC/FPC (1-11)	
CN2001	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	
CN2002	QGB2532J1-02	CONNECTOR	B-B (1-2)	
CN3001	QGB2032M4-12	CONNECTOR	B-B (1-12)	
CN3002	QGF1207C1-10	CONNECTOR	FFC/FPC (1-10)	
CN3003	QGF1016C3-16	CONNECTOR	FFC/FPC (1-16)	
CN3004	QGB2024K1-14S	CONNECTOR	B-B (1-14)	
CN3011	QGB1231M1-15	CONNECTOR	B-B (1-15)	
CN3101	QGA2001C1-02	CONNECTOR	W-B (1-2)	B
CN3104	QGF1207C1-13	CONNECTOR	FFC/FPC (1-13)	
CN3901	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	
CN7107	QGF1016C3-23	CONNECTOR	FFC/FPC (1-23)	
CN7111	QGF1016C3-11	CONNECTOR	FFC/FPC (1-11)	
⚠ CP3002	QMFZ050-1R25X-E	FUSE	1.25A 125V	
⚠ CP4002	QMFZ050-1R25X-E	FUSE	1.25A 125V	
J7101	QNZ0609-001	AV JACK	INPUT	
J7102	QNZ0609-001	AV JACK	OUTPUT	
J7104	QNN0587-002	PIN JACK	COMPONENT VIDEO OUT	
J7105	QNS0033-002	3.5 JACK	J-LIP	
J7106	QNS0100-001	3.5 JACK	REMOTE PAUSE/AV COMPULINK	
J7107	QNS0100-001	3.5 JACK	CABLE BOX	
JS3001	NSW0238-001	ROTARY ENCODER		
OT1	LP31158-001A	BOSS(MECHA) 1		
OT2	LP31185-001A	BOSS(MECHA) 2	(x2)	
S3001	QSW0602-004	PUSH SWITCH	REC SAFTY	
S3002	QSW0602-004	PUSH SWITCH	S.CASSETTE	
S3003	QSW0695-001	PUSH SWITCH	D.CASSETTE	
SD1	LP31179-002A	SHILD PLATE(PRE/REC)		
TP501	QNZ0059-001	TEST POINT	Y TO SE	
TU6001	QAU0336-003	TUNER		
W1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W5	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W6	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W8	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W9	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W10	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W11	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W12	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W13	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W14	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W15	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W16	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W17	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W18	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W19	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W20	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W21	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W22	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W23	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W25	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W26	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W29	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W30	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W31	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W32	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W33	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W34	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W35	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W36	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W37	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W38	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W40	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W41	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W42	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W44	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W46	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W47	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W48	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W49	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W50	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W51	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W52	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W53	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W54	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W55	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W56	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W57	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
X2	QAX0739-001	CRYSTAL	3.57MHz	
X3001	QAX0444-001	CRYSTAL	32.768kHz	
X3002	QAX0527-001	CRYSTAL	10.000000MHz	

A/C head board

Block No. [1][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10158-01A1	A/C HEAD BOARD ASSY		

Operation / Jack board

Block No. [2][7]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10252-01A2	OPERATION/JACK BOARD ASSY		A
PW1	LPA10255-01B2	OPERATION/JACK BOARD ASSY		B
D7204	RD6.8ES/B1/-T2	Z DIODE		
D7204 or	MTZJ6.8A-T2	Z DIODE		
D7221	SLA-580BC3T3F	LED	ILLUM	A
D7221 or	SLA-580BCT3F	LED		A
D7222	SLR-325VC-T	LED	D-THEATER	A
D7222 or	LTL-816EE-T	LED		A
D7222 or	SLR-343VC-T	LED		A
D7223	SLR343BCT3F	LED	HDMI	A
D7224	SLR-325VC-T	LED	D-VHS	A
D7224 or	LTL-816EE-T	LED		A
D7224 or	SLR-343VC-T	LED		A
C7206	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	A
C7206	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	B
C7207	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	B

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
C7221	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	A
R7202	QRE141J-750Y	C RESISTOR	75Ω 1/4W J	
R7206	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	A
R7206	QRE141J-750Y	C RESISTOR	75Ω 1/4W J	B
R7207	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	A
R7207	QRE141J-750Y	C RESISTOR	75Ω 1/4W J	B
R7221	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	A
R7222	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	A
R7223	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	A
R7224	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	A
R7225	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	A
CN7201	QGF1209F1-13	CONNECTOR	FFC/FPC (1-13)	A
CN7201	QGF1209F2-13	CONNECTOR	FFC/FPC (1-13)	B
CN7202	QGD2503C1-05	CONNECTOR	(1-5)	
J7201	QNN0591-001	PIN JACK	FRONT AV IN	
J7204	QND0084-001	S JACK	FRONT S VIDEO IN	
OT1	LP41177-001A	SHEET		B
S7216	QSW0381-001Z	TACT SWITCH	EJECT	
S7217	QSW0381-001Z	TACT SWITCH	TIMER	A
S7218	QSW0381-001Z	TACT SWITCH	POWER	
W71	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	A
WR7201	QUB221-12A4XL	SIN TWIST WIRE		

Switch / Display board

Block No. [2][8]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10252-01A1	SWITCH/DISPLAY BOARD ASSY		A
PW1	LPA10255-01B1	SWITCH/DISPLAY BOARD ASSY		B
IC7001	UPD16311GC/P/	IC		
IC7002	GP1UM281XK	IR DETECT UNIT		
IC7002 or	PNA4652M00XB	IR DETECT UNIT		
D7001	1SS133-T2	SI DIODE		A
D7001 or	1SS270A-T2	SI DIODE		A
D7002	1SS133-T2	SI DIODE		A
D7002 or	1SS270A-T2	SI DIODE		A
D7003	1SS133-T2	SI DIODE		
D7003 or	1SS270A-T2	SI DIODE		
D7004	1SS133-T2	SI DIODE		
D7004 or	1SS270A-T2	SI DIODE		
D7005	1SS133-T2	SI DIODE		
D7005 or	1SS270A-T2	SI DIODE		
D7006	1SS133-T2	SI DIODE		
D7006 or	1SS270A-T2	SI DIODE		
D7007	1SS133-T2	SI DIODE		
D7007 or	1SS270A-T2	SI DIODE		
D7014	1SS133-T2	SI DIODE		
D7014 or	1SS270A-T2	SI DIODE		
D7015	1SS133-T2	SI DIODE		
D7015 or	1SS270A-T2	SI DIODE		
D7016	1SS133-T2	SI DIODE		
D7016 or	1SS270A-T2	SI DIODE		
D7021	RD9.1ES/B2/-T2	Z DIODE		
D7021 or	MTZJ9.1B-T2	Z DIODE		
D7041	SLR-325VC-T	LED	DTS	A
D7041 or	LTL-816EE-T	LED		A
D7041 or	SLR-343VC-T	LED		A
D7041	SLR343BCT3F	LED	HDMI	B
D7042	SLR-325VC-T	LED	PCM	A
D7042 or	LTL-816EE-T	LED		A
D7042 or	SLR-343VC-T	LED		A
D7042	SLR343WBCT3	LED	D-THEATER	B
D7046	SLR-325VC-T	LED	DOLBY-D	A
D7046 or	LTL-816EE-T	LED		A
D7046 or	SLR-343VC-T	LED		A
D7047	SLA-580BC3T3F	LED	ILLUM	
D7047 or	SLA-580BCT3F	LED		
D7048	SLA-580BC3T3F	LED	ILLUM	B
D7048 or	SLA-580BCT3F	LED		B

⚠ Symbol No.	Part No.	Part Name	Description	Local
D7051	SLR343WBCT3	LED	DTV-HD	B
D7052	SLR343BCT3F	LED	DTV-SD	B
C7001	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	A
C7001	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	B
C7002	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7003	QEKJ1HM-106Z	E CAPACITOR	10uF 50V M	
C7006	QEKC0JM-227Z	E CAPACITOR	220uF 6.3V M	A
C7006	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	B
C7007	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	B
C7008	QERF1AM-227Z	E CAPACITOR	220uF 10V M	A
C7008	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	B
C7010	NCF31HZ-473X	C CAPACITOR	0.047uF 50V Z	A
C7010	QCFB1HZ-473Y	C CAPACITOR	0.047uF 50V Z	B
C7011	NCF31HZ-473X	C CAPACITOR	0.047uF 50V Z	A
C7011	QCFB1HZ-473Y	C CAPACITOR	0.047uF 50V Z	B
C7013	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C7014	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	B
R7001	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7003	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	A
R7003	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	B
R7004	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	A
R7004	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	B
R7005	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R7006	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R7007	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R7008	NRSA02J-563X	MG RESISTOR	56kΩ 1/10W J	A
R7008	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	B
R7009	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7010	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	A
R7010	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	B
R7012	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R7013	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R7014	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R7015	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R7016	QRE141J-0R0Y	C RESISTOR	0Ω 1/4W J	B
R7017	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R7021	QRE141J-0R0Y	C RESISTOR	0Ω 1/4W J	B
R7041	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7042	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7046	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	A
R7047	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R7048	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	B
R7051	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	B
R7052	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	B
R7053	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7054	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	B
CN7001	QGF1207C1-10	CONNECTOR	FFC/FPC (1-10)	A
CN7001	QGF1208F1-10	CONNECTOR	FFC/FPC (1-10)	B
CN7002	QGF1209F1-04	CONNECTOR	FFC/FPC (1-4)	
CN7003	QGF1208C1-17	CONNECTOR	FFC/FPC (1-17)	A
CN7004	QGF1208F1-17	CONNECTOR	FFC/FPC (1-17)	A
DI7001	QLF0123-001	FL TUBE		
FW7001	QUM025-07A4BF	PARA RIBON WIRE		
HD1	PQ34949-1-1	FL HOLDER(L)		
HD2	PQ34950-1-1	FDP HOLDER(R)		
S7001	QSW0381-001Z	TACT SWITCH	FF	
S7002	QSW0381-001Z	TACT SWITCH	REW	
S7003	QSW0381-001Z	TACT SWITCH	PAUSE	
S7004	QSW0381-001Z	TACT SWITCH	REW	A
S7005	QSW0381-001Z	TACT SWITCH	PLAY	A
S7006	QSW0381-001Z	TACT SWITCH	FF	A
S7011	QSW0381-001Z	TACT SWITCH	REC	
S7012	QSW0381-001Z	TACT SWITCH	PLAY	
S7013	QSW0381-001Z	TACT SWITCH	REC_SPEED	
S7014	QSW0381-001Z	TACT SWITCH	STOP	
S7015	QSW0381-001Z	TACT SWITCH	D-VHS	
S7016	QSW0381-001Z	TACT SWITCH	HDMI	
S7017	QSW0381-001Z	TACT SWITCH	TIMER	
S7018	QSW0381-001Z	TACT SWITCH	AUDIO MONITOR	A
S7021	QSW0381-001Z	TACT SWITCH	CH+	B
S7022	QSW0381-001Z	TACT SWITCH	CH-	B
WR1	WJT0163-001A	E-CARD WIRE		A

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

Jack board

Block No. [3][6]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10252-01A3	JACK BOARD ASSY		A
PW1	LPA10255-01B3	JACK BOARD ASSY		B
CN4106	QGA2001C1-06	CONNECTOR	W-B (1-6)	
J4112	QNZ0675-001	D CONNECTOR	i.LINK	
K4199	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	A
K4199	QRE141J-0R0Y	C RESISTOR	0Ω 1/4W J	B
OT1	QZW0021-001	PC SUPPORT		A

Pre / Rec board

Block No. [4][3]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10174-02A	PRE/REC BOARD ASSY		
IC601	CXA1702AR	IC		
IC602	CXA2002R	IC		
IC603	TC74HC00AF-X	SOP IC		
IC608	TC74HC02AF-XE	IC		
IC609	TC7SH08F-X	IC(DIGITAL)		
Q601	2SC4081/QRS/-X	TRANSISTOR		
Q601 or	2SD1819A/QRS/-X	TRANSISTOR		
Q601 or	2PC4081/R/-X	TRANSISTOR		
Q602	2SA1576A/QR/-X	TRANSISTOR		
Q602 or	2SB1218A/QR/-X	TRANSISTOR		
Q602 or	2PA1576/R/-X	TRANSISTOR		
Q603	2SC4081/QRS/-X	TRANSISTOR		
Q603 or	2SD1819A/QRS/-X	TRANSISTOR		
Q603 or	2PC4081/R/-X	TRANSISTOR		
Q604	2SA1576A/QR/-X	TRANSISTOR		
Q604 or	2SB1218A/QR/-X	TRANSISTOR		
Q604 or	2PA1576/R/-X	TRANSISTOR		
Q605	2SA1576A/QR/-X	TRANSISTOR		
Q605 or	2SB1218A/QR/-X	TRANSISTOR		
Q605 or	2PA1576/R/-X	TRANSISTOR		
Q606	2SA1576A/QR/-X	TRANSISTOR		
Q606 or	2SB1218A/QR/-X	TRANSISTOR		
Q606 or	2PA1576/R/-X	TRANSISTOR		
Q608	DTA144WUA-X	DIGI TRANSISTOR		
Q608 or	UN511E-X	DIGI TRANSISTOR		
Q608 or	PDTA144WU-X	DIGI TRANSISTOR		
Q608 or	RN2309-X	DIGI TRANSISTOR		
Q613	2SC4081/QRS/-X	TRANSISTOR		
Q613 or	2SD1819A/QRS/-X	TRANSISTOR		
Q613 or	2PC4081/R/-X	TRANSISTOR		
Q614	2SC4081/QRS/-X	TRANSISTOR		
Q614 or	2SD1819A/QRS/-X	TRANSISTOR		
Q614 or	2PC4081/R/-X	TRANSISTOR		
Q615	2SC4081/QRS/-X	TRANSISTOR		
Q615 or	2SD1819A/QRS/-X	TRANSISTOR		
Q615 or	2PC4081/R/-X	TRANSISTOR		
Q616	2SC4081/QRS/-X	TRANSISTOR		
Q616 or	2SD1819A/QRS/-X	TRANSISTOR		
Q616 or	2PC4081/R/-X	TRANSISTOR		
Q621	2SC4081/QRS/-X	TRANSISTOR		
Q621 or	2SD1819A/QRS/-X	TRANSISTOR		
Q621 or	2PC4081/R/-X	TRANSISTOR		
Q623	2SC4081/QRS/-X	TRANSISTOR		
Q623 or	2SD1819A/QRS/-X	TRANSISTOR		
Q623 or	2PC4081/R/-X	TRANSISTOR		
Q624	DTC144WUA-X	DIGI TRANSISTOR		
Q624 or	UN521E-X	DIGI TRANSISTOR		
Q624 or	PDTC144WU-X	DIGI TRANSISTOR		
Q624 or	RN1309-X	DIGI TRANSISTOR		
Q641	2SC3936/BC/-X	TRANSISTOR		
Q642	2SC3936/BC/-X	TRANSISTOR		
Q643	2SC3936/BC/-X	TRANSISTOR		
Q644	2SC3936/BC/-X	TRANSISTOR		
Q645	2SC3936/BC/-X	TRANSISTOR		
D601	1SS355-X	SI DIODE		
D602	1SS355-X	SI DIODE		
D606	1SS355-X	SI DIODE		
C601	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C602	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C603	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C611	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C612	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C613	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C621	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C622	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C623	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C624	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C625	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C626	NCB21HK-472X	C CAPACITOR	4700pF 50V K	
C627	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C628	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C629	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C630	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C631	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C632	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C633	NCB21EK-223X	C CAPACITOR	0.022uF 25V K	
C634	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C639	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C640	NCB21EK-223X	C CAPACITOR	0.022uF 25V K	
C641	NCB21EK-223X	C CAPACITOR	0.022uF 25V K	
C642	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C643	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C644	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C645	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C646	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C647	NCB21EK-223X	C CAPACITOR	0.022uF 25V K	
C648	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C649	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C650	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C651	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C652	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C653	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C654	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C655	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C656	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C657	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C658	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C661	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C662	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C663	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C664	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C665	NCB21HK-472X	C CAPACITOR	4700pF 50V K	
C666	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C667	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C668	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C669	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C670	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C673	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C674	NCB21EK-223X	C CAPACITOR	0.022uF 25V K	
C675	NCB21EK-223X	C CAPACITOR	0.022uF 25V K	
C676	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C677	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C678	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C679	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C680	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C681	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C682	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C683	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C684	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C685	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C686	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C687	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C688	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C689	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C692	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C693	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C694	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C698	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C701	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
C702	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C703	NCB21HK-102X	C CAPACITOR	1000pF 50V K	
C704	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C705	NCB21HK-102X	C CAPACITOR	1000pF 50V K	
C706	NDC21HJ-471X	C CAPACITOR	470pF 50V J	
C707	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C711	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C712	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C713	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C714	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C715	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C716	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C717	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C718	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C720	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C723	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C725	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C726	NDC21HJ-330X	C CAPACITOR	33pF 50V J	
C731	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C732	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C733	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C734	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C735	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
R601	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	
R602	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R604	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R605	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R606	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R608	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R609	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	
R611	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	
R612	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R614	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R615	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R616	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R618	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R619	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	
R622	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R623	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R624	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R625	NRSA02J-124X	MG RESISTOR	120kΩ 1/10W J	
R626	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R627	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R628	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R629	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J	
R631	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R632	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R633	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
R634	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
R635	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
R636	NRSA02J-392X	MG RESISTOR	3.9kΩ 1/10W J	
R637	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R639	NRSA02J-181X	MG RESISTOR	180Ω 1/10W J	
R641	NRVA02D-153X	CMF RESISTOR	15kΩ 1/10W D	
R642	NRVA02D-183X	CMF RESISTOR	18kΩ 1/10W D	
R651	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R653	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R654	NRSA02J-224X	MG RESISTOR	220kΩ 1/10W J	
R655	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R656	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R657	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R658	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J	
R659	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R663	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R664	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R665	NRSA02J-271X	MG RESISTOR	270Ω 1/10W J	
R666	NRSA02J-271X	MG RESISTOR	270Ω 1/10W J	
R667	NRSA02J-392X	MG RESISTOR	3.9kΩ 1/10W J	
R668	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R670	NRVA02D-153X	CMF RESISTOR	15kΩ 1/10W D	
R671	NRVA02D-183X	CMF RESISTOR	18kΩ 1/10W D	
R672	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R686	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R687	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R688	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R689	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R690	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R691	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R692	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R693	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R694	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R703	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R708	NRSA02J-183X	MG RESISTOR	18kΩ 1/10W J	
R709	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R710	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R711	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R712	NRSA02J-271X	MG RESISTOR	270Ω 1/10W J	
R713	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R714	NRSA02J-473X	MG RESISTOR	47kΩ 1/10W J	
R715	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R716	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J	
R717	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R721	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R722	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R723	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R724	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R725	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R726	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R727	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R728	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R731	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R732	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R733	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R734	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R735	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R736	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R746	NRVA02D-100X	CMF RESISTOR	10Ω 1/10W D	
R747	NRVA02D-100X	CMF RESISTOR	10Ω 1/10W D	
R748	NRVA02D-100X	CMF RESISTOR	10Ω 1/10W D	
R749	NRVA02D-100X	CMF RESISTOR	10Ω 1/10W D	
R750	NRVA02D-100X	CMF RESISTOR	10Ω 1/10W D	
L601	QQL29BJ-101Z	P COIL	100uH J	
L602	QQL29BJ-101Z	P COIL	100uH J	
L611	QQL29BJ-101Z	P COIL	100uH J	
L612	QQL29BJ-101Z	P COIL	100uH J	
L613	QQL29BJ-101Z	P COIL	100uH J	
L615	QQL29BJ-101Z	P COIL	100uH J	
L621	QQL29BJ-101Z	P COIL	100uH J	
L622	QQL29BJ-101Z	P COIL	100uH J	
L624	QQL29BJ-101Z	P COIL	100uH J	
L631	QQL29BJ-101Z	P COIL	100uH J	
L632	QQL29BJ-101Z	P COIL	100uH J	
B601	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B603	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B606	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CN601	QGA2001F1-04	CONNECTOR	W-B (1-4)	
CN602	QGA2001F1-04	CONNECTOR	W-B (1-4)	
CN603	QGB2024J1-14S	CONNECTOR	B-B (1-14)	
CN604	QGF1202C1-10	CONNECTOR	FFC/FPC (1-10)	
SD1	LP21290-001A	SHIELD FRAME(PRE/REC)		
TP602	QNZ0055-001	TEST POINT	A/HS2_FF	
TP611	QNZ0055-001	TEST POINT	REC_LEVEL1	
TP612	QNZ0055-001	TEST POINT	REC_LEVEL2	
TP621	QNZ0055-001	TEST POINT	PB_DATA1	
TP622	QNZ0055-001	TEST POINT	PB_DATA2	
W1	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W2	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W3	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W4	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W5	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W6	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W7	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W9	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W10	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W11	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W12	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W13	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W14	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W15	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W16	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

Digital sub board

Block No. [4][9]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA20039-01A	DIGITAL SUB BOARD ASSY		B
IC1	SN74AHC2G241T-X	IC		B
C1	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	B
R1	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	B
R2	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	B
R3	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	B
R4	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	B
WR1	QUBD72-22A1A1	SIN TWIST WIRE		B
WR2	QUBD71-22A1A1	SIN TWIST WIRE		B
WR3	QUBD73-13A1A1	SIN TWIST WIRE		B
WR4	QUBD74-08A1A1	SIN TWIST WIRE		B
WR5	QUBD78-14A1A1	SIN TWIST WIRE		B
WR6	QUBD76-08A1A1	THIN WIRE		B

Digital board

Block No. [5][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10254-01B	DIGITAL BOARD ASSY		A
PW1	LPA10254-02B	DIGITAL BOARD ASSY		B
IC1	MB91354APMT-105	IC(MCU)		
IC1 or	MB91F355PMT-105	IC(MCU)		
IC2	S-80827CNNB-G-W	IC		
IC3	AT25080N-10SC-X	IC		
IC4	SN74AHCT1G125-X	IC(DIGITAL)		
IC5	SN74AHCT1G125-X	IC(DIGITAL)		
IC6	SN74LV08APW-X	IC		
IC7	SN74AHC2G241T-X	IC		
IC8	SN74HCT08APW-X	IC		
IC9	SN74HCT08APW-X	IC		
IC10	MM1563DF-X	IC		
IC11	SN74AHCT1G125-X	IC(DIGITAL)		
IC201	JCP8054-2	IC		
IC203	HY57V161610DTC8	IC		
IC203 or	K4S161622D-TC80	IC		
IC204	KA5SDKAS01TSL-X	IC		
IC205	TC7SH08FU-X	IC(DIGITAL)		
IC205 or	SN74AHC1G08K-X	IC		
IC206	SN74LVCU04APW-X	IC(DIGITAL)		
IC207	NAX0507-001X	CXO		
IC208	SN74AHC1GU04K-X	IC		
IC208 or	TC7SHU04FU-X	IC(DIGITAL)		
IC210	MM1561JF-X	IC		
IC211	SN74LVC157APW-X	IC(DIGITAL)		B
IC402	TLC2932IPW-X	IC		
IC404	TLC2932IPW-X	IC		
IC405	SN74LV74APW-X	IC		
IC406	SN74AHC1G04DC-X	IC		
IC406 or	TC7SH04FU-X	IC(DIGITAL)		
IC406 or	SN74AHC1G04K-X	IC		
IC501	DMN8600-D0	IC(DIGITAL)		
IC502	SN74LVCU04APW-X	IC(DIGITAL)		
IC503	SN74AHC1G04K-X	IC		
IC503 or	SN74AHC1G04DC-X	IC		
IC503 or	TC7SH04FU-X	IC(DIGITAL)		
IC504	SN74ALCH62827-X	IC(DIGITAL)		B
IC505	CY24206ZC-4-X	IC		
IC702	HY5DU281622ET-J	IC		
IC703	HY5DU281622ET-J	IC		
IC704	HY5DU281622ET-J	IC		
IC705	HY5DU281622ET-J	IC		
IC706	PQ015YZ01Z-X	IC		
IC802	MBPL32TM90TN	IC		
IC802 or	MBM29LV320TE90N	IC(MICRO C ROM)		
IC803	MBPL32TM90TN	IC		
IC803 or	MBM29LV320TE90N	IC(MICRO C ROM)		
IC804	SN74LVC373APW-X	IC(DIGITAL)		
IC805	SN74LVC373APW-X	IC(DIGITAL)		
IC901	TSB41AB2PAP	IC		
IC1001	JCP8059	IC		
IC1002	HY57V161610DTC8	IC		
IC1002 or	K4S161622D-TC80	IC		
IC1101	MM1623XF-X	IC		
IC1102	SM5301BS-G-X	IC		
IC1201	PIC18LF6525IPT	IC(MCU)		
IC1301	AK4522VF-X	IC		
IC1302	BA15218F-XE	IC		
IC1303	BA15218F-XE	IC		
IC1304	GP1FM513TZ	OPT TRANSMITTER		
IC1501	JCP8064-3	IC		
IC1502	SN74LVC374APW-X	IC		
IC1503	SN74LVC157APW-X	IC(DIGITAL)		B
IC1504	SN74LVC157APW-X	IC(DIGITAL)		B
IC1701	SII9190CTG64	IC		
IC1702	MM1563DF-X	IC		
IC1703	NDC7002N-X	MOS FET		
IC1706	LD2981ABM50-X	IC		
IC1901	SN74ALCH62827-X	IC(DIGITAL)		B
Q1	DTC114EUA-X	DIGI TRANSISTOR		
Q1 or	UN5211-X	DIGI TRANSISTOR		
Q1 or	PDTC114EU-X	DIGI TRANSISTOR		
Q1 or	RN1302-X	DIGI TRANSISTOR		
Q201	DTC114EUA-X	DIGI TRANSISTOR		
Q201 or	UN5211-X	DIGI TRANSISTOR		
Q201 or	PDTC114EU-X	DIGI TRANSISTOR		
Q201 or	RN1302-X	DIGI TRANSISTOR		
Q401	DTC114EUA-X	DIGI TRANSISTOR		
Q401 or	PDTC114EU-X	DIGI TRANSISTOR		
Q401 or	UN5211-X	DIGI TRANSISTOR		
Q401 or	RN1302-X	DIGI TRANSISTOR		
Q402	UMT2N-W	PAIR TRANSISTOR		
Q403	UMX2N-W	PAIR TRANSISTOR		
Q404	UMT2N-W	PAIR TRANSISTOR		
Q405	2SC3930/C/-X	TRANSISTOR		
Q406	2SC4081/QRS/-X	TRANSISTOR		
Q406 or	2PC4081/R/-X	TRANSISTOR		
Q406 or	2SD1819A/QRS/-X	TRANSISTOR		
Q407	2SC3930/C/-X	TRANSISTOR		
Q408	2SA1532/C/-X	TRANSISTOR		
Q409	2SC5632-X	TRANSISTOR		
Q410	UMT2N-W	PAIR TRANSISTOR		
Q411	UMX2N-W	PAIR TRANSISTOR		
Q412	UMT2N-W	PAIR TRANSISTOR		
Q413	2SC3930/C/-X	TRANSISTOR		
Q414	2SC4081/QRS/-X	TRANSISTOR		
Q414 or	2PC4081/R/-X	TRANSISTOR		
Q414 or	2SD1819A/QRS/-X	TRANSISTOR		
Q415	2SC3930/C/-X	TRANSISTOR		
Q416	2SA1532/C/-X	TRANSISTOR		
Q417	2SC5632-X	TRANSISTOR		
Q418	2SC4081/QRS/-X	TRANSISTOR		
Q418 or	2PC4081/R/-X	TRANSISTOR		
Q418 or	2SD1819A/QRS/-X	TRANSISTOR		
Q419	DTC114EUA-X	DIGI TRANSISTOR		
Q419 or	PDTC114EU-X	DIGI TRANSISTOR		
Q419 or	UN5211-X	DIGI TRANSISTOR		
Q419 or	RN1302-X	DIGI TRANSISTOR		
Q420	2SC4081/QRS/-X	TRANSISTOR		
Q420 or	2PC4081/R/-X	TRANSISTOR		
Q420 or	2SD1819A/QRS/-X	TRANSISTOR		
Q421	2SA1532/C/-X	TRANSISTOR		
Q422	2SC3930/C/-X	TRANSISTOR		
Q423	2SC4081/QRS/-X	TRANSISTOR		
Q423 or	2PC4081/R/-X	TRANSISTOR		
Q423 or	2SD1819A/QRS/-X	TRANSISTOR		
Q424	2SC4081/QRS/-X	TRANSISTOR		
Q424 or	2PC4081/R/-X	TRANSISTOR		
Q424 or	2SD1819A/QRS/-X	TRANSISTOR		
Q425	2SA1532/C/-X	TRANSISTOR		
Q426	2SC3930/C/-X	TRANSISTOR		
Q427	UMT2N-W	PAIR TRANSISTOR		

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q428	UMT2N-W	PAIR TRANSISTOR		
Q501	DTC114EUA-X	DIGI TRANSISTOR		
Q501	or UN5211-X	DIGI TRANSISTOR		
Q501	or PDTC114EU-X	DIGI TRANSISTOR		
Q501	or RN1302-X	DIGI TRANSISTOR		
Q801	DTC114EUA-X	DIGI TRANSISTOR		
Q801	or UN5211-X	DIGI TRANSISTOR		
Q801	or PDTC114EU-X	DIGI TRANSISTOR		
Q801	or RN1302-X	DIGI TRANSISTOR		
Q1101	2SA1576A/QR/-X	TRANSISTOR		
Q1101	or 2SB1218A/QR/-X	TRANSISTOR		
Q1101	or 2PA1576/R/-X	TRANSISTOR		
Q1102	2SA1576A/QR/-X	TRANSISTOR		
Q1102	or 2SB1218A/QR/-X	TRANSISTOR		
Q1102	or 2PA1576/R/-X	TRANSISTOR		
Q1103	DTC144WUA-X	DIGI TRANSISTOR		
Q1103	or PDTC144WU-X	DIGI TRANSISTOR		
Q1103	or UN521E-X	DIGI TRANSISTOR		
Q1103	or RN1309-X	DIGI TRANSISTOR		
Q1104	2SA1576A/QR/-X	TRANSISTOR		
Q1104	or 2SB1218A/QR/-X	TRANSISTOR		
Q1104	or 2PA1576/R/-X	TRANSISTOR		
Q1105	UMZ1N-W	PAIR TRANSISTOR		
Q1106	2SC4081/QRS/-X	TRANSISTOR		
Q1106	or 2SD1819A/QRS/-X	TRANSISTOR		
Q1106	or 2PC4081/R/-X	TRANSISTOR		
Q1107	2SC4081/QRS/-X	TRANSISTOR		
Q1107	or 2SD1819A/QRS/-X	TRANSISTOR		
Q1107	or 2PC4081/R/-X	TRANSISTOR		
Q1108	2SA1576A/QR/-X	TRANSISTOR		
Q1108	or 2SB1218A/QR/-X	TRANSISTOR		
Q1108	or 2PA1576/R/-X	TRANSISTOR		
Q1109	2SC4081/QRS/-X	TRANSISTOR		
Q1109	or 2SD1819A/QRS/-X	TRANSISTOR		
Q1109	or 2PC4081/R/-X	TRANSISTOR		
Q1110	2SC4081/QRS/-X	TRANSISTOR		
Q1110	or 2SD1819A/QRS/-X	TRANSISTOR		
Q1110	or 2PC4081/R/-X	TRANSISTOR		
Q1111	2SA1576A/QR/-X	TRANSISTOR		
Q1111	or 2SB1218A/QR/-X	TRANSISTOR		
Q1111	or 2PA1576/R/-X	TRANSISTOR		
Q1112	2SA1576A/QR/-X	TRANSISTOR		
Q1112	or 2SB1218A/QR/-X	TRANSISTOR		
Q1112	or 2PA1576/R/-X	TRANSISTOR		
Q1113	2SA1576A/QR/-X	TRANSISTOR		
Q1113	or 2SB1218A/QR/-X	TRANSISTOR		
Q1113	or 2PA1576/R/-X	TRANSISTOR		
Q1114	2SA1576A/QR/-X	TRANSISTOR		
Q1114	or 2SB1218A/QR/-X	TRANSISTOR		
Q1114	or 2PA1576/R/-X	TRANSISTOR		
Q1201	DTC114EUA-X	DIGI TRANSISTOR		
Q1201	or UN5211-X	DIGI TRANSISTOR		
Q1201	or PDTC114EU-X	DIGI TRANSISTOR		
Q1201	or RN1302-X	DIGI TRANSISTOR		
Q1202	DTC114TUA-X	DIGI TRANSISTOR		
Q1202	or PDTC114TU-X	DIGI TRANSISTOR		
Q1202	or UN5215-X	DIGI TRANSISTOR		
Q1202	or RN1311-X	DIGI TRANSISTOR		
Q1501	DTC114EUA-X	DIGI TRANSISTOR		
Q1501	or UN5211-X	DIGI TRANSISTOR		
Q1501	or PDTC114EU-X	DIGI TRANSISTOR		
Q1501	or RN1302-X	DIGI TRANSISTOR		
Q1701	2SC4081/QRS/-X	TRANSISTOR		
Q1701	or 2PC4081/R/-X	TRANSISTOR		
Q1701	or 2SD1819A/QR/-X	TRANSISTOR		
Q1702	2SC4081/QRS/-X	TRANSISTOR		
Q1702	or 2PC4081/R/-X	TRANSISTOR		
Q1702	or 2SD1819A/QR/-X	TRANSISTOR		
Q1703	2SA1576A/QR/-X	TRANSISTOR		
Q1703	or 2PA1576/R/-X	TRANSISTOR		
Q1703	or 2SB1218A/QR/-X	TRANSISTOR		
D201	UDZ2.2B-X	Z DIODE		
D201	or UDZS2.2B-X	Z DIODE		
D401	1SS355-X	SI DIODE		
D402	1SS355-X	SI DIODE		
D1001	DAN202U-X	SI DIODE		

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1	NEHM1CM-476X	E CAPACITOR	47uF 16V M	
C2	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C4	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C5	NEHM1CM-476X	E CAPACITOR	47uF 16V M	
C6	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C8	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C9	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C10	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C11	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C12	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C13	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C14	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C15	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C16	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C17	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C19	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C20	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C21	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C22	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C23	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C24	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C25	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C26	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C27	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C28	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C29	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C30	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C31	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C32	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C33	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C34	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C35	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C36	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C37	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C38	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C39	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C40	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C41	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C42	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C43	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C44	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C45	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C46	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C47	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C48	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C49	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C50	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C51	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C52	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C53	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C54	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C59	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C61	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C62	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C64	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C72	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C73	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C201	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C202	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C203	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C204	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C205	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C206	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C207	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C209	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C210	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C211	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C212	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C213	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C214	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C215	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C216	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C217	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C218	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C219	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C220	NDC31HJ-100X	C CAPACITOR	10pF 50V J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
C221	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C222	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C223	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C224	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C225	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C226	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C227	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C228	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C229	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C230	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C233	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C234	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C235	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C236	NCB21CK-334X	C CAPACITOR	0.33uF 16V K	
C240	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C241	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C242	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C246	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C248	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C249	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C250	NDC31HJ-101X	C CAPACITOR	100pF 50V J	B
C401	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C402	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C404	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C407	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C408	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C409	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C410	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C411	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C412	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C413	NDC31HJ-6R0X	C CAPACITOR	6pF 50V J	
C414	NCB31EK-123X	C CAPACITOR	0.012uF 25V K	
C415	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C416	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C417	NEHM1CM-476X	E CAPACITOR	47uF 16V M	
C422	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C425	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C426	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C427	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C428	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C429	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C430	NDC31HJ-6R0X	C CAPACITOR	6pF 50V J	
C431	NCB31EK-123X	C CAPACITOR	0.012uF 25V K	
C432	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C433	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C434	NEHM1CM-476X	E CAPACITOR	47uF 16V M	
C436	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C437	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C438	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C439	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C441	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C442	NEHM1CM-476X	E CAPACITOR	47uF 16V M	
C443	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C444	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C446	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C447	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C448	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C449	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C451	NEHM1CM-476X	E CAPACITOR	47uF 16V M	
C452	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C453	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C501	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C504	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C506	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C507	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C510	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C511	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C512	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C513	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C514	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C515	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C516	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C517	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C518	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C519	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C521	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C522	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C524	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C526	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C527	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C528	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C530	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C531	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C532	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C534	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C535	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C537	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C538	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C539	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C540	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C542	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C545	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	B
C546	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C547	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C548	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C549	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C550	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C701	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C707	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C708	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M	
C710	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C711	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C712	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C713	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C715	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C716	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C717	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C718	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C719	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C720	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C723	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C724	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C726	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M	
C728	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C729	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C730	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C731	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C732	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C733	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C734	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C736	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M	
C738	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C740	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C741	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C742	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C743	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C744	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C747	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C748	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C751	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C753	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C754	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C756	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C757	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C758	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C760	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C762	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C763	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C764	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C765	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C766	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C767	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C768	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C769	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C770	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C771	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C802	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C803	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C804	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C806	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C807	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C903	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C904	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C905	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C906	NDC31HJ-120X	C CAPACITOR	12pF 50V J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
C907	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C908	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C909	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C910	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C913	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C914	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C916	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C917	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1001	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1002	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1003	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1005	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1006	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1007	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1008	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1009	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1010	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1013	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1014	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C1016	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1020	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1022	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1023	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1024	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1025	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1027	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1028	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1029	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1030	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1031	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1034	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1036	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1037	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1038	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1039	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1040	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1041	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1044	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1045	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1046	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1047	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1048	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1050	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1051	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1052	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1053	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1054	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1055	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1056	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1057	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1058	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1059	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1060	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1101	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1102	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1103	NEHM0JM-226X	E CAPACITOR	22uF 6.3V M	
C1104	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1105	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1106	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1108	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1109	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1110	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1111	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1112	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1113	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1114	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1115	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C1117	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1119	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1120	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1126	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1127	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1128	NDC31HJ-820X	C CAPACITOR	82pF 50V J	
C1129	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1132	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1134	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C1135	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1138	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1142	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1143	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1154	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1157	NCB21EK-103X	C CAPACITOR	0.01uF 25V K	
C1158	NCB21EK-103X	C CAPACITOR	0.01uF 25V K	
C1159	NCB21EK-103X	C CAPACITOR	0.01uF 25V K	
C1160	NCB21EK-103X	C CAPACITOR	0.01uF 25V K	
C1201	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1203	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1204	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1205	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1206	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J	
C1207	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C1208	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1209	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1210	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1301	NEHM1CM-106X	E CAPACITOR	10uF 16V M	
C1302	NEHM1CM-106X	E CAPACITOR	10uF 16V M	
C1303	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C1304	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C1305	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1306	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1307	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C1308	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C1309	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1310	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1311	NEHM1CM-226X	E CAPACITOR	22uF 16V M	
C1312	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1313	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1314	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1315	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C1316	NEHM1CM-106X	E CAPACITOR	10uF 16V M	
C1317	NEHM1CM-106X	E CAPACITOR	10uF 16V M	
C1318	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1319	NEHM1CM-476X	E CAPACITOR	47uF 16V M	
C1322	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C1323	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C1324	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C1325	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C1328	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C1329	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C1330	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C1331	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C1332	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1333	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1338	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C1340	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1341	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1343	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C1346	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1503	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1504	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1506	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1507	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C1509	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C1510	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C1701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1702	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C1705	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1706	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1707	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1708	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1710	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1711	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1712	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1713	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1715	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1716	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1717	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1718	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C1719	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1720	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1721	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1722	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C1723	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C1901	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C1902	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C1903	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	B
C1904	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C1905	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	B
C1959	NDC31HJ-101X	C CAPACITOR	100pF 50V J	B
C1960	NDC31HJ-101X	C CAPACITOR	100pF 50V J	B
C2001	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2020	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2021	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2022	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2023	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2024	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2025	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2027	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2028	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2029	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2030	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2031	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2034	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2046	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2048	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2054	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2067	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2068	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2069	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2070	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
R1	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R5	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R9	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R10	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R11	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R12	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R13	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R14	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R15	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R16	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R17	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R18	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R19	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R20	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R21	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R22	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R23	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R24	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R25	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R26	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R27	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R28	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R29	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R30	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R31	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R33	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R34	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R35	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R36	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R37	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R38	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R41	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R42	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R43	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R44	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R45	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R46	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R47	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R48	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R49	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R50	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R51	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R52	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R53	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R54	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R55	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R56	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R57	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R58	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R59	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R60	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R61	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R62	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R63	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R64	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R65	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R66	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R67	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R68	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R69	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R70	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R71	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R72	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R73	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R74	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R75	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R76	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R77	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R78	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R79	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R80	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R81	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R82	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R83	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R84	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R85	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R86	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R87	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R88	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R89	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R90	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R91	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R92	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R201	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R203	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R204	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R205	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R206	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R207	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R212	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R213	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R214	NRSA63D-472X	MG RESISTOR	4.7kΩ 1/16W D	
R215	NRSA63D-472X	MG RESISTOR	4.7kΩ 1/16W D	
R216	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R217	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R218	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R219	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R220	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
R221	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R222	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	
R224	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
R225	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R226	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
R227	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R228	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R229	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R230	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R232	NRSA63J-201X	MG RESISTOR	200Ω 1/16W J	
R233	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R234	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R235	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R236	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R237	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R238	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R239	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R240	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R242	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
R243	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R245	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R247	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R248	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R249	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R250	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R251	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R254	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R257	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R258	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R259	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R260	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R261	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R266	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
R266	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	B
R403	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R404	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R405	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R406	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R407	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R408	NRSA63J-911X	MG RESISTOR	910Ω 1/16W J	
R409	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R410	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R411	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R412	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R413	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R414	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R415	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R420	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R421	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R422	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R423	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R424	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R425	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R426	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R427	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R428	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R429	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R430	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R431	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R432	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R435	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R436	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R437	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R438	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R439	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R440	NRSA63J-911X	MG RESISTOR	910Ω 1/16W J	
R441	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R442	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R443	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R444	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R445	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R446	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R447	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R452	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R453	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R454	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R455	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R456	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R457	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R458	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R459	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R460	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R461	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R462	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R463	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R464	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R465	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R466	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R467	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R468	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R469	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R471	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R472	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R473	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R474	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R475	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R476	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R477	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R478	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R479	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R480	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R481	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R482	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R483	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R484	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R485	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R487	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R488	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R489	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R490	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R491	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R492	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R493	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R494	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R495	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R496	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R501	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	A
R505	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R506	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R508	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R509	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R510	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R512	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R513	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R514	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R516	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R517	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R519	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R520	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R521	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R522	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R524	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R525	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R527	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R536	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R539	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R540	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R541	NRSA63F-1181X	MG RESISTOR	1.18kΩ 1/16W F	
R547	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R549	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R550	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R551	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R552	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R554	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R555	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R556	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R558	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R559	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R560	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R561	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R563	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R565	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R566	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R567	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R568	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R569	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R570	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R571	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R575	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R576	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R577	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R579	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R580	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R581	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R582	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R583	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R584	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R587	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R588	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R590	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R591	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R592	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R593	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R594	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
R595	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R596	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R597	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R599	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R600	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R701	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R702	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R703	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R704	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R707	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R708	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R709	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R710	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R711	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R712	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R713	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R714	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R715	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R716	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R717	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R718	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R719	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R720	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R721	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R722	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R723	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R724	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R725	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R726	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R727	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R728	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R729	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R730	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R731	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R732	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R733	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R734	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R735	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R736	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R737	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R738	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R739	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R740	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R741	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R742	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R743	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R744	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R745	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R746	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R747	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R748	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R749	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R750	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R751	NRSA63D-471X	MG RESISTOR	470Ω 1/16W D	
R752	NRSA63D-271X	MG RESISTOR	270Ω 1/16W D	
R753	NRSA63D-102X	MG RESISTOR	1kΩ 1/16W D	
R754	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R755	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R756	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R757	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R758	NRSA63D-471X	MG RESISTOR	470Ω 1/16W D	
R801	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R802	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R803	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R804	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R805	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R806	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R807	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R808	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R809	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R810	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R812	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R813	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R814	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R902	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R903	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R904	NRSA63D-751X	MG RESISTOR	750Ω 1/16W D	
R905	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D	
R906	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R907	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R909	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R910	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R911	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R913	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R919	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R920	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R921	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R922	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R923	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R924	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R925	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R926	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R927	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R928	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R929	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R930	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R931	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R932	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R933	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R934	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R1001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1002	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1003	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1005	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1007	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1008	NRSA63D-221X	MG RESISTOR	220Ω 1/16W D	
R1009	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1010	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1012	NRSA63J-680X	MG RESISTOR	68Ω 1/16W J	A
R1012	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	B
R1013	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1014	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1015	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1016	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1017	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1022	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1023	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1024	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1025	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1026	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	
R1027	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1028	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1029	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	
R1030	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1031	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1032	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	
R1033	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1034	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1101	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1103	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1104	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1105	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	
R1106	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R1107	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1108	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R1109	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	
R1110	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R1113	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1114	NRSA63D-221X	MG RESISTOR	220Ω 1/16W D	
R1115	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1116	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1117	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1118	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1119	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1120	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
R1158	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1159	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1160	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1161	NRSA63D-221X	MG RESISTOR	220Ω 1/16W D	
R1163	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R1164	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1165	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1166	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R1167	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R1168	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1170	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R1171	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R1172	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R1173	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1174	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1176	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R1177	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1179	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1180	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1181	NRSA63D-122X	MG RESISTOR	1.2kΩ 1/16W D	
R1182	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1183	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R1185	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R1187	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1188	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1189	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1190	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1191	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1201	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1202	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1203	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1204	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R1205	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R1206	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1208	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1209	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1210	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1211	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1212	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1213	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1215	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1216	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1217	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1218	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1219	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1220	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1221	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1222	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1223	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1224	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1225	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1227	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1228	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1229	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1230	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1301	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R1302	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R1303	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R1304	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R1305	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1306	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1307	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1308	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1309	NRSA63J-150X	MG RESISTOR	15Ω 1/16W J	
R1310	NRSA63J-150X	MG RESISTOR	15Ω 1/16W J	
R1311	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1313	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1314	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1315	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1316	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1317	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1318	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1319	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1320	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1321	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1322	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1323	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1324	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1325	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1326	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1327	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1328	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1329	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1330	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R1331	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R1332	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1342	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1343	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1346	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1349	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1350	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1351	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1352	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1353	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R1354	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1501	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1503	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1701	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	A
R1701	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	B
R1702	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1703	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1704	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1705	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1706	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1709	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1710	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R1713	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R1714	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R1715	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1716	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1717	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1718	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1719	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1720	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1721	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1722	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R1724	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1725	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1726	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1901	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1902	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1903	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	B
R1904	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	B
R1905	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1906	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1907	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1908	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1909	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R1911	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1912	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1913	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1914	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	B
R1915	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1916	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
R1917	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	B
R1918	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	B
R1919	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2001	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2002	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2003	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2004	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
RA1	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA2	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA3	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA4	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA203	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA204	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA205	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA206	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA213	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA214	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA215	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA501	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	A
RA502	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	A
RA503	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	A
RA504	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	A
RA505	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	A
RA513	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA514	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA517	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA518	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
RA519	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA520	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA521	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA523	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA524	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA701	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA702	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA703	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA704	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA705	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA706	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA707	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA708	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA713	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA714	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA715	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA717	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA718	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA719	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA720	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA721	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA722	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA723	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA724	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA725	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA726	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA727	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA728	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA729	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA730	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA731	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA732	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA733	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA734	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA735	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA801	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA802	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA803	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA804	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA901	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA902	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA903	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA904	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1001	NRZ0040-221X	NET RESISTOR	220Ω 1/16W J x4	
RA1002	NRZ0040-221X	NET RESISTOR	220Ω 1/16W J x4	
RA1003	NRZ0040-221X	NET RESISTOR	220Ω 1/16W J x4	
RA1004	NRZ0040-221X	NET RESISTOR	220Ω 1/16W J x4	
RA1005	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1006	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1007	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA1008	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA1009	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA1010	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA1701	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1702	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1703	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1704	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1705	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA1706	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	
RA1901	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	B
RA1902	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	B
RA1903	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	B
RA1904	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	B
RA1905	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	B
RA1906	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	B
RA1907	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	B
RA1908	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	B
RA1909	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4	B
L201	NQL144K-100X	P COIL	10uH K	
L202	NQL144K-100X	P COIL	10uH K	
L401	NQL144K-100X	P COIL	10uH K	
L402	NQL144K-100X	P COIL	10uH K	
L403	NQL904J-150X	COIL	15uH J	
L404	NQL144K-100X	P COIL	10uH K	
L405	NQL144K-100X	P COIL	10uH K	
L406	NQL144K-100X	P COIL	10uH K	
L407	NQL904J-150X	COIL	15uH J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
L408	NQL144K-100X	P COIL	10uH K	
L409	NQL144K-100X	P COIL	10uH K	
L411	NQL144K-100X	P COIL	10uH K	
L412	NQL144K-100X	P COIL	10uH K	
L414	NQL144K-100X	P COIL	10uH K	
L501	NQL144K-100X	P COIL	10uH K	
L901	NQL144K-100X	P COIL	10uH K	
L903	NQR0514-002X	FILTER COIL		
L904	NQR0514-002X	FILTER COIL		
L905	NQR0514-002X	FILTER COIL		
L906	NQR0514-002X	FILTER COIL		
L1001	NQL144K-100X	P COIL	10uH K	
L1101	NQL144K-100X	P COIL	10uH K	
L1102	NQL144K-100X	P COIL	10uH K	
L1103	NQL144K-100X	P COIL	10uH K	
L1104	NQL144K-100X	P COIL	10uH K	
L1105	NQL904J-220X	COIL	22uH J	
L1301	NQL144K-100X	P COIL	10uH K	
L1302	NQL144K-100X	P COIL	10uH K	
L1303	NQL144K-100X	P COIL	10uH K	
L1701	NQL144K-100X	P COIL	10uH K	
L1702	NQR0560-001X	EMI FILTER		
L1703	NQR0560-001X	EMI FILTER		
L1704	NQR0560-001X	EMI FILTER		
L1705	NQR0560-001X	EMI FILTER		
B5	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
B204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B205	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B214	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
B219	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B220	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B221	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B401	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B402	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B802	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B1501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B1502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B1503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B1504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B1505	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B1506	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B1507	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B1508	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B1509	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
CN401	QGA2001F6-04X	CONNECTOR	W-B (1-4)	
CN402	QGA2001F6-04X	CONNECTOR	W-B (1-4)	
CN911	QGA1201F2-06X	CONNECTOR	W-B (1-6)	
CN1201	QGF1016F2-05W	CONNECTOR	FFC/FPC (1-5)	
CN1901	QGB0603L1-B0	CONNECTOR	B-B (1-110)	B
CN8001	QGA2001F6-04X	CONNECTOR	W-B (1-4)	
CN8002	QGA2001F6-12X	CONNECTOR	W-B (1-12)	
CN8003	QGF1016F2-16W	CONNECTOR	FFC/FPC (1-16)	
CN8004	QGF1016C4-05X	CONNECTOR	FFC/FPC (1-5)	
CN8801	QGF0508F1-36X	CONNECTOR	FFC/FPC (1-36)	
CN8802	QGA2001F6-04X	CONNECTOR	W-B (1-4)	
CN9001	QGF1016F2-11W	CONNECTOR	FFC/FPC (1-11)	
CN9301	QGF1016F2-23W	CONNECTOR	FFC/FPC (1-23)	
FL401	NQR0497-001X	LPF		
FL402	NQR0497-001X	LPF		
J902	QNZ0474-001	D CONNECTOR	i.LINK IN/OUT DV IN	
J1701	NNZ0099-001	HDMI CONNECTOR	HDMI OUT	
K1	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K2	PELN0984-150Y	NOISE FILTER		
K202	PELN0984-150Y	NOISE FILTER		
K203	NQR0129-002X	FERRITE BEADS		
K204	NQR0129-002X	FERRITE BEADS		
K205	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K206	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K209	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K210	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K211	PELN0984-150Y	NOISE FILTER		
K213	NQR0129-002X	FERRITE BEADS		

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

⚠ Symbol No.	Part No.	Part Name	Description	Local
K214	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K215	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
K501	NQR0129-002X	FERRITE BEADS		
K503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K506	NQR0129-002X	FERRITE BEADS		
K509	NQR0129-002X	FERRITE BEADS		
K510	NQR0129-002X	FERRITE BEADS		
K512	NQR0129-002X	FERRITE BEADS		
K513	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K516	NQR0129-002X	FERRITE BEADS		
K517	NQR0129-002X	FERRITE BEADS		B
K802	NQR0129-002X	FERRITE BEADS		
K903	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1001	PELN0984-150Y	NOISE FILTER		
K1002	PELN0984-150Y	NOISE FILTER		
K1003	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1201	PELN0984-150Y	NOISE FILTER		
K1701	PELN0984-150Y	NOISE FILTER		
K1702	PELN0984-150Y	NOISE FILTER		
K1901	NQR0129-002X	FERRITE BEADS		B
LC1	NQR0512-008X	EMI FILTER		
LC2	NQR0512-008X	EMI FILTER		
LC3	NQR0512-008X	EMI FILTER		
LC4	NQR0512-008X	EMI FILTER		
LC5	NQR0512-008X	EMI FILTER		
LC6	NQR0512-008X	EMI FILTER		
LC7	NQR0512-008X	EMI FILTER		
LC8	NQR0512-008X	EMI FILTER		
OT1	LC41656-001A	COOLING SHEET	(x3)	
OT2	LP41198-001A	SHIELD TIGHT		
OT3	QQR1624-001	FERRITE PLATE	(x2)	B
OT4	LP41209-002A	C.F TAPE		B
SD1	LP10550-001A	SHIELD FRAME(DIGITAL)		
SD2	LP21288-001A	SHIELD COVER(DIGITAL TOP)		
SD3	LP21289-001A	SHIELD COVER(DIGITAL BOTTOM)		
X1	NAX0641-001X	CRYSTAL	10.000000MHz	
X201	NAX0510-001X	CRYSTAL	19.13856MHz	
X202	NAX0693-001X	CRYSTAL	27000KHz	
X901	NAX0551-001X	CRYSTAL	24.576MHz	
X1201	NAX0641-001X	CRYSTAL	10.000000MHz	

Loading motor board

Block No. [5][5]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10158-01A2	LOADING MOTOR BOARD ASSY		

Junction board

Block No. [9][2]

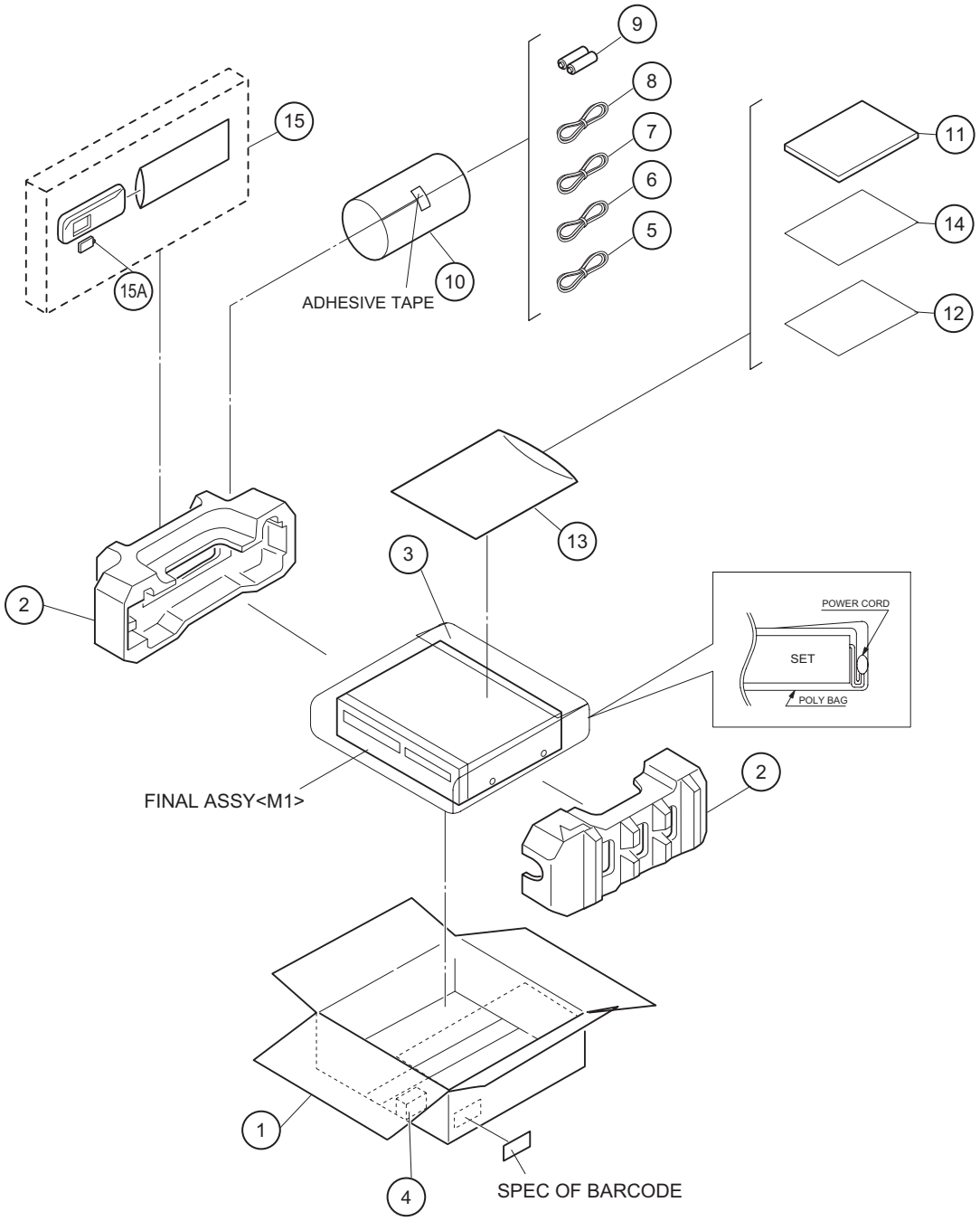
⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10251-01D2	JUNCTION BOARD ASSY		A
PW1	LPA10251-02D2	JUNCTION BOARD ASSY		B
IC5501	MPD5S014	IC(HYBRID)		B
IC5502	MPD4S010	IC(HYBRID)		
IC5503	MPD3S010S	IC(HYBRID)		
IC5504	MM1565AF-X	IC		
Q5501	DTC114EUA-X	DIGI TRANSISTOR		
Q5501 or	UN5211-X	DIGI TRANSISTOR		
Q5501 or	RN1302-X	DIGI TRANSISTOR		
Q5501 or	PDTC114EU-X	DIGI TRANSISTOR		
Q5502	UMD12N-W	DIGI TRANSISTOR		
Q5502 or	XP4313-W	DIGI TRANSISTOR		
Q5503	2SD2144S/UV/-T	TRANSISTOR		
Q5503 or	2SC3576-JVC-T	TRANSISTOR		
D5501	MTZJ5.6C-T2	Z DIODE		
D5501 or	RD5.6ES/B3/-T2	Z DIODE		
C5501	NCB21AK-105X	C CAPACITOR	1uF 10V K	B
C5502	QECP1CM-477	E CAPACITOR	470uF 16V M	B
C5503	NCB21AK-105X	C CAPACITOR	1uF 10V K	B
C5504	QECP1CM-477	E CAPACITOR	470uF 16V M	B
C5505	NCB21AK-105X	C CAPACITOR	1uF 10V K	B
C5506	QECP1CM-477	E CAPACITOR	470uF 16V M	
C5507	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5508	QECP1CM-477	E CAPACITOR	470uF 16V M	
C5509	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5510	QECP1CM-477	E CAPACITOR	470uF 16V M	
C5511	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5512	QECP1CM-477	E CAPACITOR	470uF 16V M	
C5513	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5514	QECP1CM-477	E CAPACITOR	470uF 16V M	
C5515	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5516	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C5517	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5518	QECP1CM-477	E CAPACITOR	470uF 16V M	B
C5534	NCB11CK-105X	C CAPACITOR	1uF 16V K	
R5501	NRSA63D-822X	MG RESISTOR	8.2kΩ 1/16W D	B
R5502	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	B
R5503	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D	B
R5504	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	B
R5506	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	
R5508	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R5509	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R5510	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5511	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
L5501	PELN1184	CHOKE COIL		
L5502	PELN1184	CHOKE COIL		
L5503	PELN1184	CHOKE COIL		B
B5502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A
B5503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	B
CN5501	QGB1231M1-15	CONNECTOR	B-B (1-15)	
CN5502	QGA2001C1-05	CONNECTOR	W-B (1-5)	B
CN5503	QGA2001C1-08	CONNECTOR	W-B (1-8)	B
CN5504	QGA2001C1-12	CONNECTOR	W-B (1-12)	
CN5505	QGF1207C1-04	CONNECTOR	FFC/FPC (1-4)	
CN5506	QGA2001C1-02	CONNECTOR	W-B (1-2)	B
⚠ CP5501	QMFZ049-2R0Z-E	FUSE	2A 125V	
⚠ CP5502	QMFZ049-1R5Z-E	FUSE	1.5A 125V	
W5551	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

Packing materials and accessories parts list

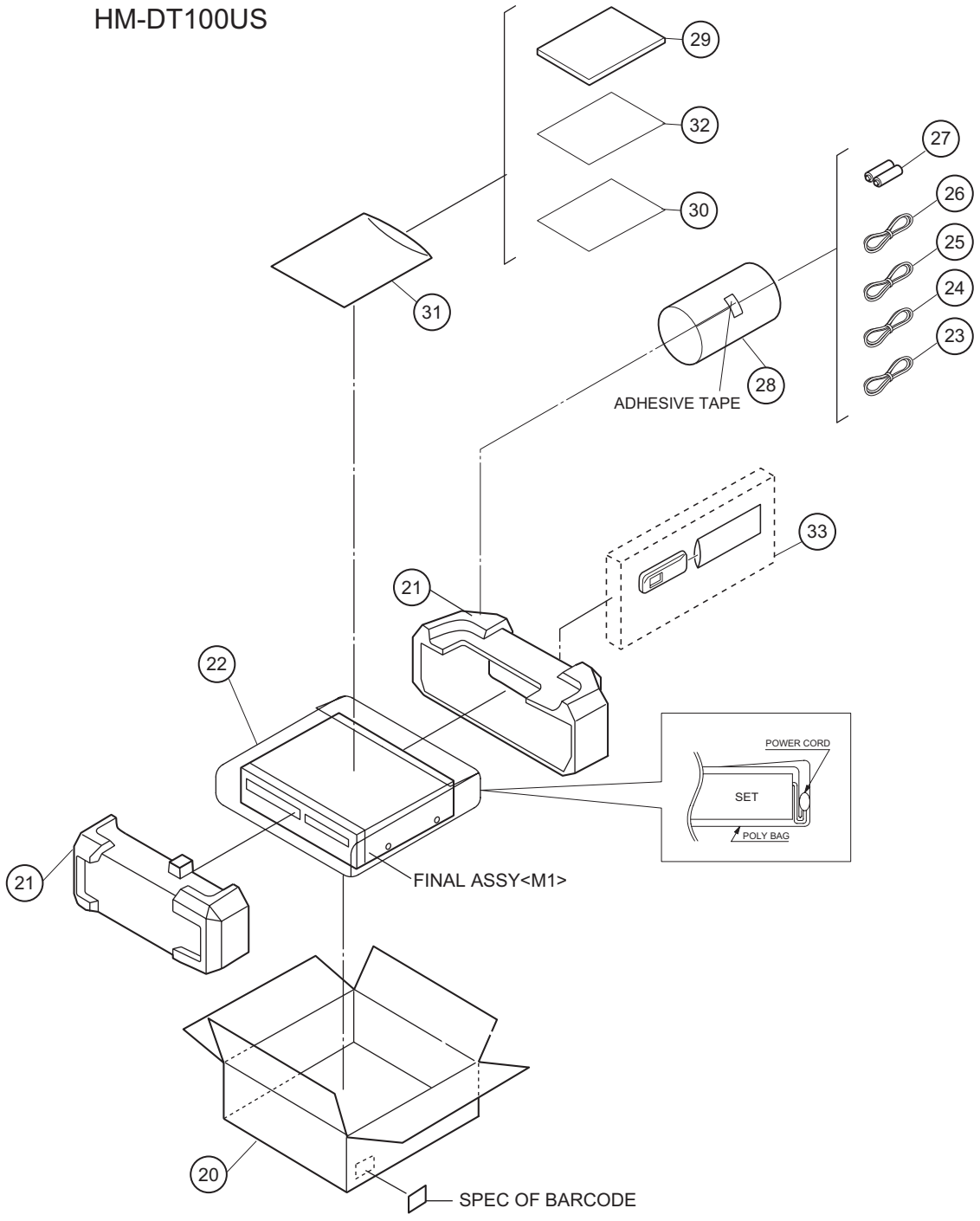
The instruction manual to be provided with this product will differ according to the destination.

Block No. M3MM

HM-DH5US



HM-DT100US


29
32
30
31
27
26
25
24
23
28
ADHESIVE TAPE
33
21
22
POWER CORD
SET
POLY BAG
21
FINAL ASSY<M1>
20
SPEC OF BARCODE

MODEL	MARK
HM-DH5US	A
HM-DT100US	B

Packing and accessories

Block No. [M][3][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	LP31419-002A	PACKING CASE		A
2	LP31416-001A	CUSHION ASSY		A
3	PQM30021-105	POLY BAG		A
4	LP31258-001A	MINI CUSHION		A
5	QAM0501-003	RF CABLE		A
6	QAM0516-002	S CABLE		A
7	QAM0499-001	AUDIO CABLE		A
8	QAL0517-004	LED CABLE ASSY		A
9	----------	BATTERY	R6 TYPE(x2)	A
10	QPC02202230P	POLY BAG	22cm x 22cm	A
⚠ 11	LPT0943-001B	INST.BOOK	(ENGLISH)	A
⚠ 11	LPT0943-002B	INST.BOOK	(FRENCH)	A
12	LPT0698-004A	SHEET(D-VHS)		A
13	QPC02503530P	POLY BAG	25cm x 35cm	A
14	BT-51034-2	REGIST CARD		A
15	LP21036-013C	REMOCON		A
15A	LP40254-010A	COVER(BATTERY)		A
20	LP31433-004A	PACKING CASE		B
21	LP31435-001A	CUSHION ASSY		B
22	PQM30021-105	POLY BAG		B
23	QAM0501-003	RF CABLE		B
24	QAM0516-002	S CABLE		B
25	QAM0499-001	AUDIO CABLE		B
26	QAL0517-004	LED CABLE ASSY		B
27	----------	BATTERY	R6 TYPE(x2)	B
28	QPC02202230P	POLY BAG	22cm x 22cm	B
⚠ 29	LPT0960-001B	INST.BOOK	(ENGLISH)	B
⚠ 29	LPT0960-002B	INST.BOOK	(FRENCH)	B
30	LPT0698-004A	SHEET(D-VHS)		B
31	QPC02503530P	POLY BAG	25cm x 35cm	B
32	BT-51034-2	REGIST CARD		B
33	LP21036-043A	REMOCON		B